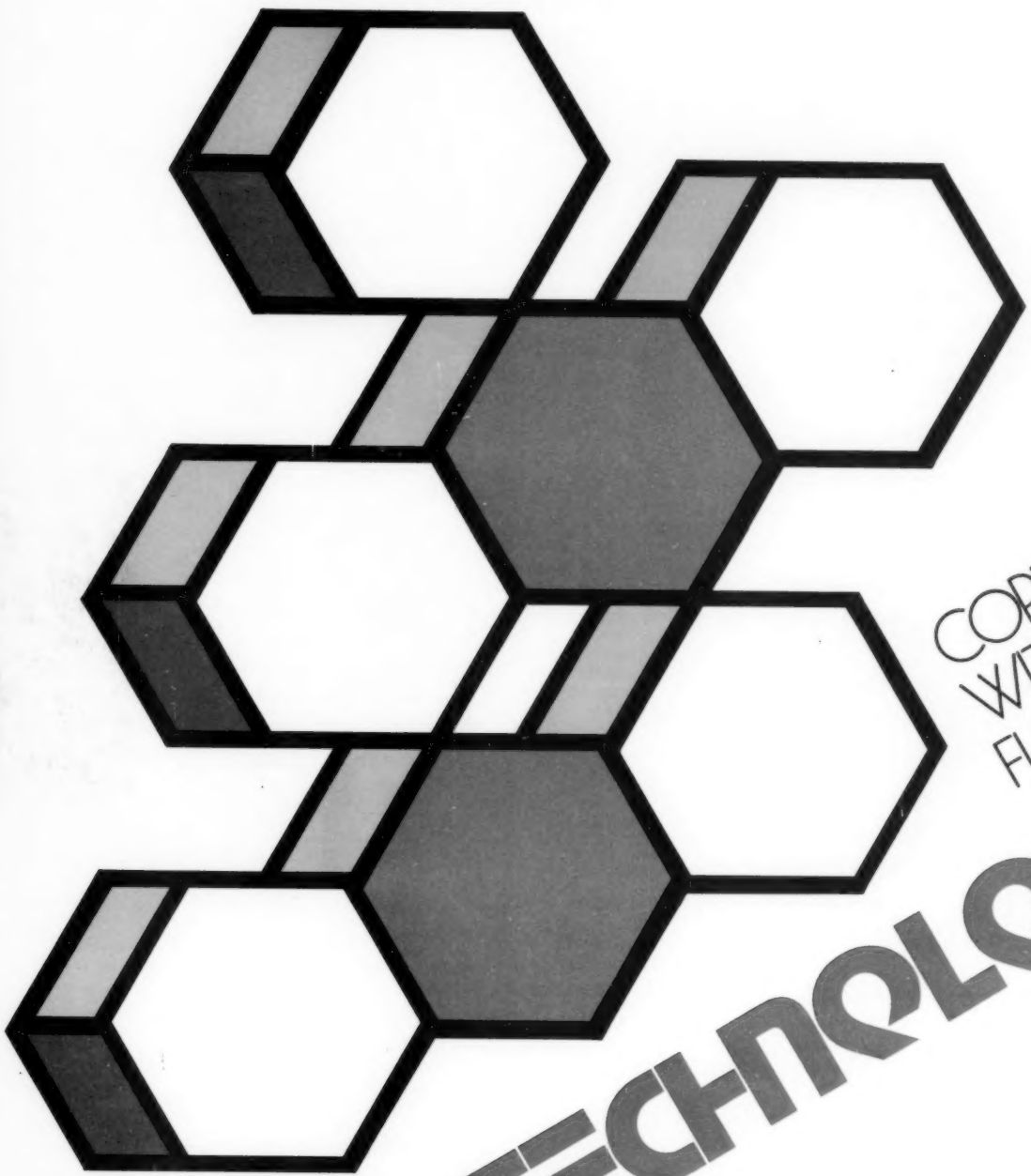
COMMERCE AMERICA

U.S. Department of Commerce / September 26, 1977



COPING WITH FUTURE TECHNOLOGY

Newsmemo

Demand for engineers and scientists continues on an uptrend. An index in this field based on the number of help-wanted ads in selected trade publications and newspapers has moved upward since mid-1976. For the second quarter of 1977 it averaged 148.2 (1961 averages form the 100 base), which was the highest quarterly average attained since 1967. This rise was expected to continue in the third quarter.

One good turn deserves another. Nine Commerce District Offices in the Midwest got together last year as "Export Matchmakers," putting manufacturers in touch with export management firms at a conference in Chicago. They are doing it again at the McCormick Inn in Chicago Oct. 20-22. At last year's event, each manufacturer had the opportunity to meet with at least six different export management companies and discuss in private his individual requirements and review possible international sales strategies, and then come to some informed conclusions about whether to enter the export scene.

California will again have a state trade promotion agency. New state legislation has created a Department of Economic and Business Development, and among its five divisions is an Office of International Trade. The office will compile and publish data on the state's international trade, a function that has been handled partially by nongovernmental enterprises since the California Department of Commerce was closed several years ago. By statute the new office is also to process trade leads, compile a California trade directory and otherwise assist in expansion of the state's trade.

Americans working abroad are working for all of us. This point comes out of the current discussions on retaining or easing the present income tax provisions affecting such persons. U.S. engineers, architects and construction contractors working in other lands annually account for billions of export dollars and assist the sale of supplies and equipment that provides thousands of U.S. jobs. Technical consultants, teachers, doctors, economists, bankers do the same, though less directly.

Heat pumps continue to be popular among customers for air conditioning units. They are currently the fastest selling segment in the unitary air conditioning market. About 46 percent of year-to-year volume improvement in that market has been in heat pump units. In the first seven months of this year, unitary air conditioner shipments were 14 percent above the same 1976 period.

The arrival of the diesel engine in a popular line of U.S.-made cars is timely. Present U.S. refinery capacity can take care of production of automotive diesel fuel for as much as 45 percent of the U.S. car fleet without major capital investment, according to the Department of Transportation. Extension of the 1977 anti-pollution standard on nitrogen oxide through 1980 makes an increase in the dieselization of the U.S. car fleet feasible, according to automotive engineers.

Production of small aircraft is at the highest rate ever in the U.S. And with lively activity in big transports, especially at Boeing, the whole aerospace industry is exhibiting momentum. The value of U.S. aerospace shipments for 1977 is projected to be $31.6 billion, 11 percent above the $28.4 billion shipments of 1976. Aerospace continues to be the largest single manufacturing contributor to the nation's trade balance, exporting $3.7 billion during the first six months of 1977, while imports amounted to $328.7 million in this field.

Conserve energy; insulate homes; put "paper wool" in ceilings and walls; fireproof it with boric acid. That chain of events illustrates how shortages develop in today's industrial society. Growth of the "paper wool" cellulosic insulation industry in response to national energy-saving efforts led to a surge in demand for boric acid for fireproofing the insulation. The three domestic producers of boric acid have been unable to meet the sudden demand increase. Established customers get allocated supplies, and the new entrants in the insulation field (up to 300 entrepreneurs, many with minimal capital) have to use other fireproofing agents, or hold up production.

COMMERCE AMERICA

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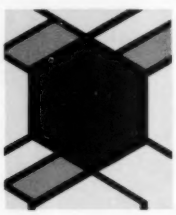

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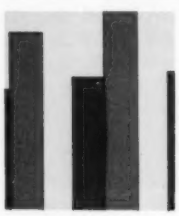
Coping With Future Technology

Technology-generated problems currently plaguing the economy and what can be done about them concerns an official of Commerce's National Bureau of Standards.



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COVER: Complexity and growth which have characterized American technology in recent years have also created a need for a new research relationship between industry, government and academe, Dr. Howard Sorrows, a Commerce Department technologist, reports in an article beginning on page 4.

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Published biweekly by the U.S. Department of Commerce, Washington, D.C. Annual subscription rate $22 ($6 addition for foreign mailing). Single copy domestic, 90 cents. Single copy for foreign mailing, $1.20. Make checks or money orders payable to Superintendent of Documents and mail to Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, or to any U.S. Department of Commerce District Office.

All subscription inquiries and address changes should be sent to the Superintendent of Documents, at the above address. This is the central distribution agency for U.S. Government publications.

Microfiche copy available at $2.25 per issue from National Technical Information Service, Springfield, Virginia 22151. Other inquiries should be sent to the U.S. Department of Commerce, 14th Street and Constitution Avenue, NW, Washington, D.C. 20230.

Controlled circulation postage paid at Merrifield, Va. Application to mail at controlled circulation rates is pending at Merrifield, Va.

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ECONOMIC HIGHLIGHTS

How The Economy Adjusted To Wave Of New Jobseekers In 1964-74

This article was prepared by Chief Economist Courtenay Slater in collaboration with staff economist Thomas W. Kraseman.

Dr. Slater

During the latter 1950s, many economists and demographers began to point out the labor force implications of the continuing very high postwar birth rates. After nearly a century of slowing in the rate of labor force expansion, a sudden sharp acceleration obviously was coming after 1962, when the first of the postwar babies would reach age 16. Some economists expressed alarm that the pace of economic growth, left to itself, could not possibly speed up sufficiently to absorb this tidal wave of jobseekers. Drastic new policies would be needed, they argued, or a severe worsening of unemployment surely must ensue.

With the hindsight of 20 years, it is instructive to look back and see how the economy adapted to this unprecedented development. Useful insights into current short-range problems, as well as long-range policy, can be gained from this exercise. For the purposes of this review, the years 1954, 1964, and 1974 have been selected as reference points for comparison. Not only are they a convenient decade apart, but in each of them the economic climate was about the same. Thus the complicating effects of cyclical differences are minimized. Furthermore, the year 1964 is very close to the dividing line between slow and rapid labor force growth.

The wave of new labor force entrants arrived on schedule, of course. It proved even larger than predicted, reflecting not only the postwar baby boom, but also, beginning about 1970, an unforeseen acceleration of the rise in labor force participation by women and teenagers. As shown in panel 1 of the charts, in the period from 1954 to 1964, both the civilian labor force and employment had both grown at nearly the same rate as the population of labor force age (16 years and over). In the following decade, population growth speeded up markedly, but the labor force rose at a considerably faster rate than the population. Nevertheless, some of the forebodings of the 1950s proved groundless—employment gains also speeded up, and consequently, although the unemployment rate for teenagers rose, the overall rate of unemployment averaged lower in the 1964-74 period than in the previous decade.

(Subsequently, of course, the unemployment rate rose rapidly as a result of the 1974-75 recession. From an average of 5.6 percent in 1974 it moved close to 9 percent at one point in 1975, and, at approximately 7 percent at present, has yet to regain its pre-recession level).

Which industries were absorbing the newcomers? Employment growth accelerated in virtually all major nonfarm employment sectors, except for state and local government, where growth was already very high. In the second decade, as in the first, the bulk of the employment gains were accounted for by trade, services, and state and local government—79 percent of the total gain from 1954 to 1964, and 70 percent from 1964 to 1974.

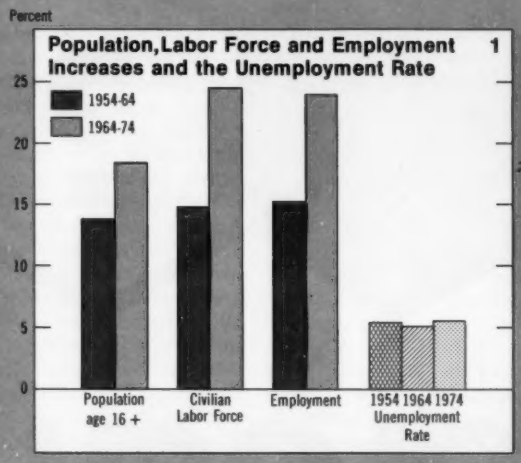
Close examination of the industrial pattern of the acceleration, however, reveals a significant shift. The greatest speeding up occurred in industries directly engaged in the production and distribution of goods — manufacturing, mining, construction, transportation, and trade—rather than in the purely service-producing activities, such as banking, health care, and government. The goods-producing and distributing industries accounted for about one-third of the nonfarm employment gain in the 1954-64 decade, but for nearly half of the much larger gain in the 1964-74 period. This shift toward goods is probably attributable in large measure to the effects of declining birth rates in the second decade from the extremely high levels in the first. As noted above, state and local government employment as a whole rose at the same high rate in both decades, but the rise in school employment slackened sharply. In addition, the declining numbers of young children needing support and the increased proportion of the population with jobs—notably teenagers—permitted consumers to purchase many expensive items that they previously could not afford.

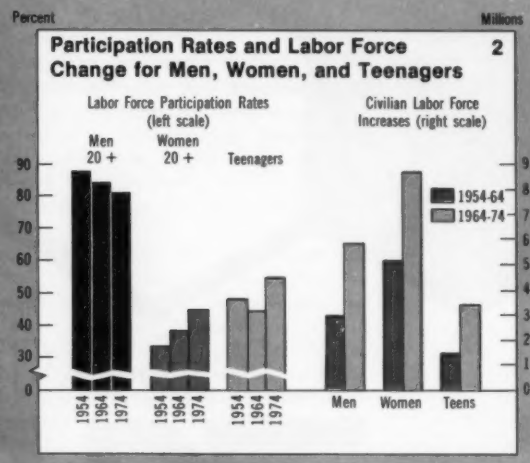
Panel 2 of the charts shows something of the anatomy of the labor force changes. The participation rate for men has declined, with the drop mostly for men of 25 years and over. This reflects such factors as earlier retirement, declining employment on farms, the lessened importance of the husband's income in families where wives are employed, and introduction of social security payments for disability after 1962. On the other hand, the rise in participation rates for women and teenagers accelerated markedly in the second decade. In both decades, but especially in the second, the major part of the labor force expansion occurred among women and teenagers.

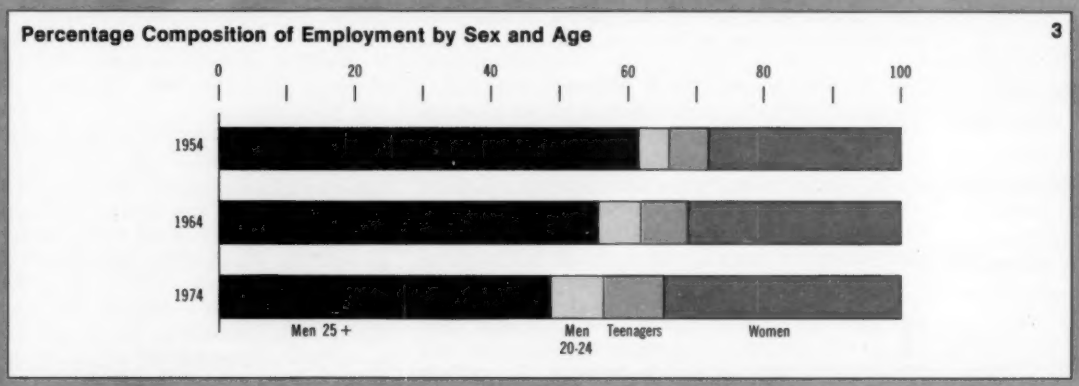
The effects of these differential changes on the distribution of employment by age and sex appear in the third panel. This shows that the proportion of men age 25 and over in total employment fell from 61 percent in 1954 to 49 percent in 1974, while the proportion of less experienced workers—teenagers, young men, and women—rose correspondingly.

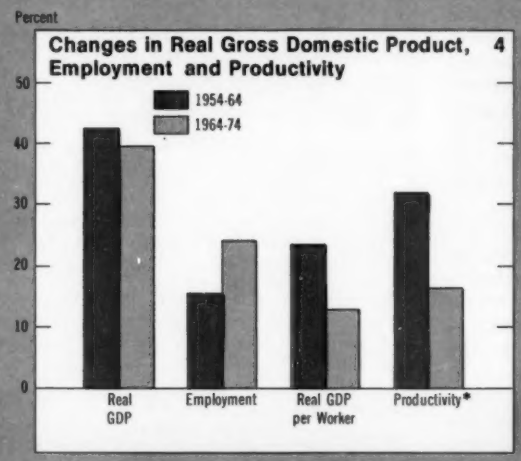
Since employment rose much more sharply in the 1964-74 decade than the first, it might be supposed, *a priori*, that Gross Domestic Product (GDP) growth accelerated similarly. The fourth panel of the charts shows, however, that GDP actually rose a little less sharply in the second decade; the impact of higher employment was reflected, not in a stronger rise in output, but in a slower gain of productivity. The slowing in productivity gains, in turn, is probably attributable in some measure to the substantial increase in the proportion of less experienced workers in the labor force, as noted above. Shifts in the composition of output also have affected productivity gains. Reasons for the drop in productivity growth remain a matter of conjecture.

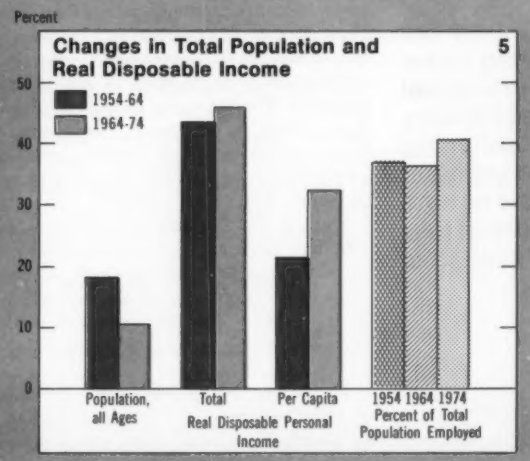
In the long run a slower rate of growth in productivity means smaller gains in real income per worker. However, in the short run, this relationship can be offset by shifts in population and labor force patterns. As shown in panel 5, real disposable personal income in total rose very slightly faster in the 1964-74 decade than in the previous period—as one might expect, given the almost even rates of gain in real GNP. However, the total population rose only about half as fast in the second decade as the first, while at the same time the proportion of the population employed increased markedly, after a slight decline in the earlier decade. These factors combined to produce a considerable acceleration of the rise in real disposable income per capita, despite the slower gains in productivity.





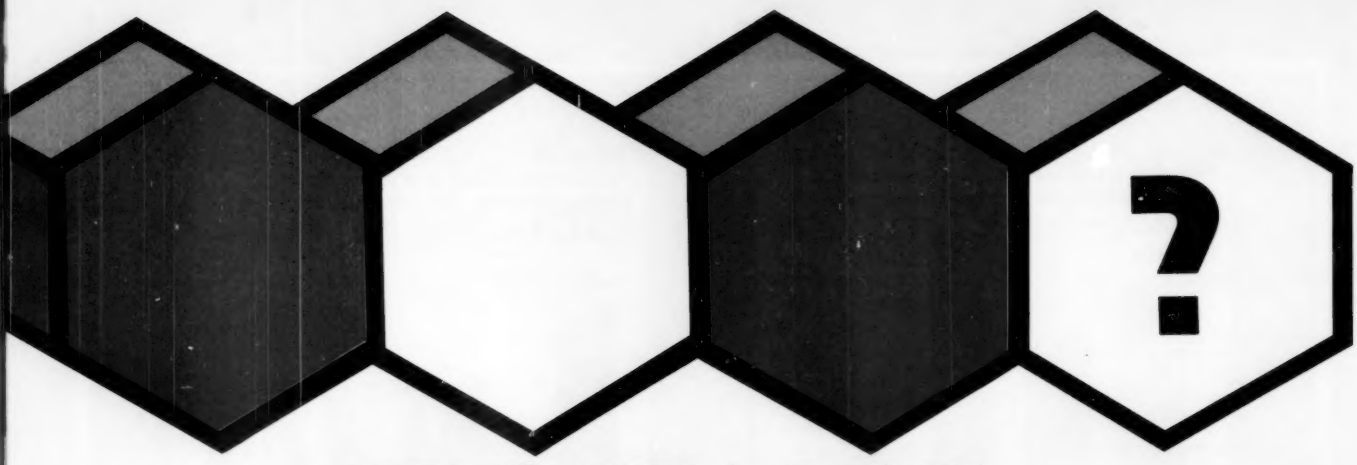






*Output per hour of all persons, private nonfarm business sector.

Sources: Bureau of Labor Statistics, Bureau of Economic Analysis.



COPING WITH FUTURE TECHNOLOGY

Dr. Howard E. Sorrows, the Associate Director for Programs of Commerce's National Bureau of Standards, has for many years been actively concerned with the role of technology in the U.S. economy. In this article he cites the technology-generated problems currently plaguing the economy, and proposes a solution.

. . . we are entering a new technological era. Technology is becoming more sophisticated and natural resources less readily available.

Technology's explosive growth and increasing complexity have created a need for coordinating and invigorating the relationship between the nation's industries, governments, and universities.

Recognizing its importance, the federal establishment supports technology to a significant extent. The Department of Commerce, in particular, devotes two-thirds of its manpower to the development and application of technology in various segments of the economy. The National Bureau of Standards, a principal factor in this area, has learned during the 76 years of its existence how to work with the free enterprise system, providing useful services to both the public and private sectors.

During the past 201 years the U.S. economic system has produced a high-technology society of unparalleled wealth and strength. Technology has become a primary determinant in our economic growth. Entrepreneurs quickly learned to exploit science and technology for major advances in industry and business.

For many years conditions for industrial growth in this country were optimum. We had an abundance of readily available, high-grade natural resources; we had a rapidly growing labor force, and within our own borders an ever-expanding market for our goods and services.

Industry had the best of both worlds, a free hand to introduce new technology, and a minimum of regulation—both because of the national commitment to free enterprise and because for many years the new technologies could be absorbed without apparent consequence.

From the beginning of the technological revolution, the United States has led the world in economic growth. For example, the per capita GNP increased sevenfold in the 100-years prior to 1975. Much of the growth must be credited to technology; a Brookings Institution analysis found that technical innovation was responsible for 85 percent of the nation's productivity growth between 1929-69.

Technology not only enhanced our productivity, but greatly increased the country's resource base by developing entirely new products such as plastics, discovering offshore oil, and providing the ability to exploit lower-grade ores. Advanced knowledge and instrumentation led to more discoveries that were the basis for a new generation of high-technology products, and these discoveries led on to still another round of discoveries and product applications.

Now, however, we are entering a new technological era. Technology is becoming more sophisticated and natural resources less readily available. The trends which are affecting the economy include:

- Consumer goods are becoming increasingly technology-intensive. Consumers complain that they no longer have freedom of choice in the marketplace. The technical sophistication and complexity of many products prohibits the consumer from making informed purchases.
- Diffusion of technology is imperfect—the United States has a vast reservoir of technology which is not being fully exploited.
- Industrial companies tend to underinvest in the kind of research which leads to the creation of technology. There are many economically sound reasons for their behavior, for example:

—the projected benefits of research are often diffuse, and the sponsoring company cannot capture enough rewards;

—the company cannot follow-up on technology advances due to restrictions for developing new plants;

—capital outlays are sometimes so large and risky that a single company will not handle them, and

—technology is becoming so sophisticated that R&D is very expensive.

The regulation of industrial technology is accelerating. In many cases, we are trying to put the genie of technology back in the bottle. Society may not fully realize the necessity for reasonable regulation based on sound technical understanding—regulation which protects society but does not drastically and unfairly hamper economic growth.

Under these new circumstances the economic system is confronted with three critical problems whose solutions are strongly technology intensive:

—to increase productivity without degrading the physical environment,

—to compete with our international trading partners without reducing the quality of our workers' lives,

—to meet the rising expectations of our citizens for personal safety, better health care, and more leisure while simultaneously dealing with energy and materials shortages.

While technology alone will not be sufficient to resolve these problems, they certainly won't be solved without it.

The astronomical projected costs of regulation are startling. For example, the Council of Environmental Quality estimates that the regulation of air and water quality will cost more than $500 billion over the next ten years. The National Academy of Sciences estimates the total cost to the economy of federal environmental regulations at 1 to 2 percent of the gross national product. There will be similar high costs associated with regulating noise, electronic interference, toxic materials, and others.

While these costs sound high, they may be only the tip of the iceberg and not represent the real toll that regulation will take on the economy. For example, some industrialists say that 50-80 percent of their R&D which would have normally gone toward new product development has been diverted to responding to regulation. Others report that uncertainty as to future regulatory decisions is hamstringing investments in new ventures.

Finally, multi-layered requirements regulating the building of new plants lead to unacceptable delays in those that actually do get built—thirteen years for utility plants in the U.S. versus five years in Japan.

These barriers to industrial vigor are coming at a time when excessive inflation has eaten away the depreciation replacement costs of plant and facilities, and domestic markets are being invaded by international competitors supported by effective industry-government partnerships in their own countries. Shortages of energy and the increasing costs of materials also are causing problems.

Considering the above environment for venture capital, it should come as no suprise that the number of new innovative companies entering the market has decreased markedly in the past several years.

The overriding challenge to the U.S. economy now is to manage the application of our technical resources and implement solutions that will be satisfactory in human terms and that preserve the essential character of our economic system.

Our approach must take full account of the growing complexity, sophistication and inter-disciplinary character of modern technology. We must be particularly aware of the tight interdependence of technology and scientific research.

Drawing on long NBS experience in dealing with industries, universities and other governmental units, it is quite clear that the present linkages between industry, the scientific communities and government must be nurtured and refined. A type of relationship must be developed wherein each participant performs his own mission better through collaboration with his partners.

The first order of business for establishing this relationship would be to identify: (1) critical or generic technology which will not be developed or transferred due to lack of skills, facilities or risk capital, and (2) barriers to the use of improved technology. The partners would then collaborate in analyzing the economic, environmental and social benefits which would ensue should this technology be made available.

As a third step, in cases where the return on investment promises to be highly favorable and yet no member of the partnership will carry out the development alone, the Federal Government could catalyze the development of necessary technology or institutions.

Such a partnership of industry, government and academia would be particularly effective in addressing technological needs of certain civilian industries, state and local governments and for addressing the needs for international technology transfer.

Industry should lead in identifying bottlenecks to technical progress. Universities should emphasize awareness of current industry and government needs in training scientists, engineers and managers. The federal role includes assuring an adequate research base, providing forums for information exchange and collaborating with the private sector in the building of mechanisms and institutions for technology transfer. Since the required degree of collaboration can best be fostered through an exchange of people, personnel exchanges between industry, government and the research community should receive high priority.

While there is no intent to change the traditional academic role of creating new knowledge, training scientists and engineers, and more recently turning out entrepreneurs and managers—this partnership will give academia a better grasp of the problems of industry and plans of government, as well as better cognizance of economic, social and technological trends.

What about the future and the chances of success? At the present many signs are good: The level of scientific and technological activity is at an all time high; U.S. labor remains the most productive in the world; many of our most serious problems are recognized.

Continued successful growth of the U.S. economy will depend on the ingenuity and vigor brought to bear on collaborative efforts such as the one outlined above. Such efforts will challenge the science and technology community and provide exciting opportunities.

Creative managers of technology should look forward to the coming years with optimism.

. . . the present linkages between industry, the scientific communities and government must be nurtured and refined.

Domestic Business Report

Capital Investment Plans Again Revised Upward

SURVEYS OF BUSINESS SPENDING INTENTIONS SHOW STEADY RISE SINCE FIRST OF YEAR

U.S. business' latest estimate of its capital investment for 1977 is significantly higher than projections made nine months ago.

Business now plans to spend $136.5 billion for new plant and equipment this year, 13.3 percent more than the total for 1976, according to a survey conducted in late July and August by Commerce's Bureau of Economic Analysis. The planned increase in spending indicated by the latest survey compares with the 12.3 percent increase reported in June, 11.7 percent reported in March, and 11.3 percent reported in January. Spending in 1976 was $120.5 billion, only a 6.8 percent rise over 1975.

These data are not adjusted for price change. Capital goods prices, as measured by the implicit price deflator for fixed non-residential investment in the national income and product accounts, rose 4.8 percent in 1976 and at about that same rate in the first two quarters of 1977. If the latest spending plans reflect expectations of similar price increases for the remainder of 1977, an 8 percent increase in real spending is indicated.

Actual spending in the second quarter rose 3.1 percent to an annual rate of $134.2 billion. Plans called for another 3.1 percent rise in the third quarter and a 2.6 percent rise in the fourth.

Spending in the second quarter was very close to the projection reported in June. The projections for the third and fourth quarters have been raised: 1.1 percent in the third and 2.1 percent in the fourth.

By type of industry

Manufacturing spending rose 5½ percent in the second quarter; plans call for increases of 3 percent in the third and 5 percent in the fourth. Non-manufacturing spending rose 1½ percent in the second quarter; planned increases are 3 percent for the third and 1 percent for the fourth. First quarter spending increased 4 percent for both manufacturing and non-manufacturing industries.

For the year 1977, manufacturers plan a 15½ percent increase in spending. The increase is 18 percent for durable goods industries, with the largest gains planned by motor vehicles (56 percent), "other durables" (26 percent), electrical machinery (24 percent), and nonelectrical machinery (17 percent). Non-durables industries plan a 13½ percent increase with the largest increases in rubber (27 percent), petroleum (20 percent), and textiles (14 percent). Other major manufacturing industries plan smaller increases except iron and steel, which anticipates a 2 percent decline.

Nonmanufacturing industries plan an 11½ percent increase, largely reflecting the increases by electric and gas utilities—16 percent and 27 percent, respectively. Sizable increases are planned also by air transportation (33 percent), communications (14 percent), railroads (12 percent), and mining (11 percent). A 34-percent decrease is planned by the "other transportation" group, reflecting completion of the Trans-Alaska pipeline.

Investment projects started by manufacturers during the second quarter of

Secretary's Statement

The upward adjustment in business plans for spending on new plant and equipment suggests that business executives are becoming more confident about the performance of the economy in future years. During the rest of this year, business fixed investment expenditures will be providing somewhat more stimulus than previously estimated.

This is an encouraging development in a sector that had been lagging.

Continued substantial increases in investment will be required in future years for well-balanced growth—that is, for the kind of economic expansion that can be sustained over a period of time. I am confident that the Administration will continue to develop policies designed to encourage investment. This is one of the important objectives of the fundamental tax reforms which the President soon will be proposing.

—Juanita M. Kreps

CAPITAL SPENDING, 1975-77

	Actual 1975	*Actual 1976*	*Expected 1977*	*% change 1975-76*	*% change 1976-77*
	(Billions of dollars)				
All industries	**112.78**	**120.49**	**136.49**	**6.8**	**13.3**
Manufacturing	47.95	52.48	60.60	9.4	15.5
Durable goods	21.84	23.68	27.92	8.4	17.9
Nondurable goods	26.11	28.81	32.68	10.3	13.5
Nonmanufacturing	64.82	68.01	75.88	4.9	11.6
Mining	3.79	4.00	4.45	5.4	11.3
Railroad	2.55	2.52	2.81	−1.2	11.8
Air transportation	1.84	1.30	1.72	−29.2	32.7
Other transportation	3.18	3.63	2.41	14.3	−33.7
Public utilities	20.14	22.28	26.29	10.6	18.0
Communication	12.74	13.30	15.19	4.4	14.2
Commercial and other	20.60	20.99	23.02	1.9	9.7

1977 totaled $15.2 billion, seasonally adjusted. This is little changed from the first quarter, when starts totaled $15.3 billion. A 7-percent increase in durable goods was offset by a 7-percent decrease in non-durables. The primary metals, electrical machinery, and food-beverage industries reported large increases, while the petroleum industry showed a sizable drop.

The value of new projects started by manufacturers was slightly larger than their capital expenditures in the second quarter of 1977; thus there was a small increase in carryover—the amount still to be spent on plant and equipment projects under way. Carryover totaled $38.6 billion at the end of June, $0.3 billion higher than at the end of March.

Starts by public utilities totaled $3.8 billion in the second quarter; this compares with $9.8 billion in the first quarter and $10.2 billion in the fourth quarter of 1976. Carryover of utility projects was $112.9 billion at the end of June, down $2.5 billion from the end of March.

Coal-Gasification Plant May Lure New Industries

Industries go where the fuel is nowadays, and Commerce is trying to help some slow-growth areas get their share.

Secretary of Commerce Juanita M. Kreps has approved grants totaling $3.2 million for a project converting coal into gas for industrial uses, to help stimulate economic growth in fuel-short areas.

The grants are the first made by Commerce's Economic Development Administration (EDA) under new legislative authority to develop energy-related projects for industrial growth. They will go to the Greater Hazleton Community-Area New Development Organization, of Hazleton, Pa., a public non-profit industrial development group.

The funds will be used to construct and equip a coal-gasification plant with transmission lines at Hazleton—in the anthracite region of northeastern Pennsylvania. The plant will be located in the city's Humboldt Industrial Park and will be designed to convert coal through a heating process into gas to serve 12 medium-sized industries.

Local officials anticipate that the plant will be completed in September 1978. They add that it will help to meet the long-range growth goals of Hazleton, Luzerne County and the multi-county Northeastern Pennsylvania Economic Development District to create jobs by attracting new industry to the area.

The Appalachian Regional Commission will provide $1.2 million for the project and EDA, $2 million. The Greater Hazleton Community-Area New Development Organization will provide $800,000.

KEY BUSINESS INDICATORS

QUARTERLY SERIES

Indicators	IV Qr76	I Qr77	II Qr77	Percent Change From Year Ago
GROSS NATIONAL PRODUCT				
(bil.$) annual rate	1,755.4	1,810.8	1,869.9	10.5
REAL GNP				
(% change) annual rate	1.2	7.5	6.2	4.6
CORPORATE PROFITS [1]				
(bil.$) annual rate	123.1	125.4	140.2	8.5
OUTPUT PER HOUR, NONFARM BUSINESS SECTOR [2]				
(% change) annual rate	—1.8	5.0	0.4	1.6
UNIT LABOR COST [3]				
(% change) annual rate	8.6	5.3	7.7	6.9
PERSONAL INCOME				
(bil.$) annual rate	1,432.2	1,476.8	1,517.2	11.0
REAL DISPOSABLE PERSONAL INCOME				
(% change) annual rate	4.9	3.1	7.3	4.1

MONTHLY SERIES

Indicators	June	July	August	Percent Change From Year Ago
RETAIL SALES				
(bil.$)	58.4	58.9	59.9	9.6
CONSUMER PRICE INDEX [3]				
(% change)	0.6	0.4	—	6.7
WHOLESALE PRICE INDEX [3]				
(% change)				
Finished Goods	0.1	0.0	0.1	6.6
Consumer	—0.2	—0.1	—0.1	6.5
Producer	0.4	0.4	0.4	6.7
Farm Products, Processed Foods and Feeds	—3.6	—2.1	—2.1	1.4
Industrial Commodities	0.3	0.5	0.5	7.1
Crude Materials	—1.6	0	1.9	11.2
NEW FACTORY ORDERS				
(bil.$)	111.7	108.4	—	9.2
Durable goods(bil.$)	58.6	55.6	—	8.5
FACTORY SHIPMENTS				
(bil.$)	110.9	109.5	—	10.2
BUSINESS INVENTORIES				
(bil.$)	315.5	317.4	—	9.0
INDUSTRIAL PRODUCTION [2]				
(1967 = 100)	137.9	138.9	138.2	5.3
HOUSING STARTS				
annual rate (mil. units)	1.90	2.08	2.02	32.2
CIVILIAN LABOR FORCE [3]				
(thousands)	97,641	97,305	97,697	2.5
Employed	90,679	90,561	90,771	3.3
Unemployed	6,962	6,744	6,926	—7.9
Unemployment rate (%)	7.1	6.9	7.1	*
EXPORTS				
(mil.$)	10,112	10,150	—	1.9
IMPORTS				
F.A.S. transaction value	12,932	12,476	—	16.4
C.I.F. value	13,810	13,330	—	15.8

ALL DATA SEASONALLY ADJUSTED.
Original data from the Bureau of Economic Analysis and the Bureau of the Census except as noted.
[1] Including inventory valuation and capital consumption adjustments.
[2] Federal Reserve Board.
[3] Bureau of Labor Statistics.
* Unemployment rate in August 1976 was 7.9 percent.

As of Sept. 19, 1977

RELIABLE OCEAN DUMPING DATA SOUGHT BEFORE SCHEDULED 1981 PHASEOUT

Will the industrial wastes and sewage sludge which we are dumping into the oceans and the Gulf of Mexico come back to haunt us?

Finding the manifold answer to this vital question is the challenge facing the manager of Commerce's Ocean Dumping Program, Dr. P. Kilho Park.

Use of the oceans as a dumping ground for man-created wastes has been a major issue in some areas for years. Dr. Park emphasizes that the time for finding out the scientific facts about the effects is now, so that what has often been an emotional issue may be clarified by genuine information.

Up until April 1973, ocean dumping was largely unregulated. In that month, the Environmental Protection Agency (EPA) initiated a permit program under which dumping of sewage sludge and industrial wastes can only be made at selected sites on a strictly regulated basis. In addition, the Army Corps of Engineers issues permits for dumping dredged materials.

The immediate problem is that the controlled dumping of sewage sludge is to be phased out by the end of 1981, and most of the dumping of industrial wastes is supposed to be ended before that time. Under this arrangement, the only dumping that would be allowed would be that judged not unacceptably harmful to the marine environment.

This means that within four years most of the dumpers will be required to take their wastes elsewhere. The question is where? NOAA scientists hope that satisfactory land-based alternatives can be developed. But suppose that satisfactory alternatives are not developed by the deadline. What then?

Some say the deadline was "pulled out of a hat," and was not based on any realistic calculation as to probable fulfillment. However, T. A. Wastler, Chief of the Marine Protection Branch of the EPA, says he has every reason to believe that it will be met.

Land-based alternatives to ocean dumping, he explains, include land-fill, composting, incineration, and pyrolysis, a form of chemical decomposition in which the material is reduced to charcoal.

At present, Camden, N.J., has a temporary permit under which it can dump sewage sludge until the end of 1977 at Deepwater Dumpsite 106, so-called because it is located 106 miles southeast of the New York Bight. Camden is said to be developing a composting plan for the sewage sludge thereafter.

Composting produces a fertilizer which, because it is mixed with heavy chemicals that may be toxic, is unsuitable for agricultural use, although it may be used for golf courses and parklands. Uncertainty exists with regard to incineration and pyrolysis. One problem is cost. Dr. Wastler reports that incineration also might not be acceptable for large communities because it could create air quality problems.

TRACKING WASTE—*Members of a scientific group aboard the NOAA ship* Researcher *check recorders used to track the dispersion of waste dumped in the Gulf of Mexico.*

In this situation, NOAA's Ocean Dumping Program has been developed to carry out monitoring and research on the effects of ocean dumping and to provide technical information to the EPA and the Army Corps of Engineers.

Dr. Park says it is highly important that the research program to determine the effects of ocean dumping get going as rapidly as possible. "The opportunity is now," he emphasizes. "We should not wait until 1981 to determine the effects of ocean dumping."

Thus far, $1 million has been provided for the research work, which Dr. Park says is "a drop in the bucket" compared to the job that needs to be done. An additional $2 million is in prospect, he explains, and he has asked for $5 million for fiscal year 1980.

"If we had $6 million," he comments, "we could do ten times as much as we are doing now."

Dr. Park says he is concerned, not only about the effect of wastes on the fish and other marine life of the seas, but about their possible disease-producing effects on people. He is also concerned that if no satisfactory alternatives to ocean dumping have been developed by 1981, a demand may rise for renewed or increased dumping, even though inadequate information has been developed as to the effects.

"I need a lot of friends," he comments.

At present, he says, he has gathered together a small group of young Ph.Ds. who are being pushed to carry on the work they have mapped out. "We are not concerned about politics," he explains. "Our interest is confined to the scientific aspects of the problem. I am here to get the work done."

Dr. Park stresses the need for continuous studies instead of going to a dumpsite two or three times a year to check on what has happened in the interim.

The effects of waste materials on fish are due for study, and sensing devices will be moored to the ocean floor so that continuous readings may be taken of their effects on the marine food chain and the ocean waters.

NOAA scientists explain that, nationally, by far the greatest volume of ocean dumping is dredged material, and that in many offshore regions it represents the largest source of pollutants. But large quantities of industrial wastes still are being dumped into the oceans, although under EPA regulation the volume has declined sharply.

Deepwater Dumpsite 106 is primarily a dumping ground for industrial wastes from duPont and American Cyanamid

plants, and only incidentally for Camden sewage sludge.

Dr. Park says the schedule of the Ocean Dumping Program for this year includes the study of industrial waste dumped off the New Jersey coast, sewage sludge off the New Jersey and New York coasts, with particular reference to Deepwater Dumpsite 106, and industrial waste off the mouth of the Mississippi River and the Texas coast.

For 1978 the schedule includes the study of the effects of dredged materials dumped off the mouth of the Mississippi River and industrial waste off Puerto Rico. The 1979 plan calls for the study of dredged materials dumped off the Texas and Florida coasts. The 1980 schedule includes the study of dredged materials dumped off the California coast. Also included is a study of dredged materials dumped off the coast of Washington, although this may have to be passed up.

Ocean dumping at present is a controlled and directed operation. But it is admittedly only a small portion of the uncontrolled and undirected pollution that is poured into the nation's coastal waters. Other sources are storm water overflow, raw sewage discharges, and outfall pipes that virtually use the coastal waters as a massive sewer.

Comdr. R. Lawrence Swanson, of NOAA, assigned to the Marine Ecosystems Analysis Program of the New York Bight Project, says that while it is true that about 80 percent of the ocean dumping is in the New York Bight area, it accounts for only a small percentage of the mass of pollutants going into the Bight.

The New York Bight is a region of about 15,000 square miles reaching from Montauk Point to the edge of the Continental Shelf and extending to a point due east of Cape May, N.J. Cdr. Swanson says the near shore areas of the Bight are badly contaminated, but that the outer reaches of the Bight are in fairly good condition, although they would not compare with the Alaskan shore areas.

The Hudson River admittedly is a major contributor to the pollution in the Bight, and at least part of the pollution load is from areas up the river.

Also a major source of coastal pollution, Swanson says, is the outfall pipe, which reaches from land into the coastal waters and has the same effect as dumping. He points to Los Angeles as an example of a community that uses the outfall pipe as a means of getting rid of wastes.

In 1976, he recalls, a series of natural occurrences put a severe strain on the oxygen content of the water in a large area of the Bight, creating something approaching an anoxic condition and resulting in a large fish kill.

Cdr. Swanson says that, with conditions continuing as they are, there likely will be more and bigger such kills.

Pointing out that the New York Bight Project had recommended the phasing out of ocean dumping, he says that when this matter has been dealt with it still will represent only a small portion of the whole problem.

"Any idea that solving the ocean dumping problem will solve the anoxia problem is just whistling Dixie," Comdr. Swanson declares.

"Yes," Dr. Park comments, "but even though ocean dumping is only 5 percent of the whole problem, it provides a significant opportunity to study what pollution does when dumped into the ocean, and this is what we need to get on with."

Dr. Wastler explains that sewage treatment plants are being built or planned to deal with the problem of raw and inadequately treated sewage, and while these plants are expensive they should help greatly to reduce the pollution load in the New York Bight and elsewhere.

So far as storm water runoff is concerned, he says, little can be done about it, but with people doing what they can the pollution problem should be reduced to about 10 percent of the now uncontrolled pollution load.

The most effective control, he emphasizes, is at the source, and with public awareness programs conducted at the state and local level there should be more people involvement in the day-to-day decisions relating to pollution. This will be a big help, he observes, and the more involvement the better.

"We expect some ocean dumping to continue," he says. "There is no intent to phase out all dumping, only that which has an unacceptable impact on the environment."

New Solar Plant Concept Points To Commercial Employment By 1990

A conceptual design has been chosen for the nation's first experimental solar "power tower", a ten-megawatt electrical generating plant to be built near Barstow, California, at a cost of about $100 million.

The design is based upon the cylindrical "inside out" boiler (receiver), metal-glass mirrors (heliostats), and oil/rock thermal storage subsystems developed by a team headed by McDonnell Douglas Astronautics Company as part of a two-year development program.

"The successful completion of the conceptual design phase of the project is a major achievement toward meeting our cost goals for solar thermal electric power," said Dr. Henry H. Marvin, Director of the Division of Solar Energy at the Energy Research and Development Administration (ERDA). "We now have a good basis for confidence that these plants can be built on a commercial scale by 1990 at a cost which should make them attractive to the electric utilities."

30 Tuna Boat Skippers Cited For Porpoise Violations; Foreign Herring Quota Upheld

Commerce's National Oceanic and Atmospheric Administration (NOAA) has issued notices of violation to 30 skippers of U.S. yellowfin tuna purse seine fishing vessels, most of them from the West Coast.

NOAA's National Marine Fisheries Service (NMFS), which issued the notices, said most of the violations were for failure to use proper porpoise-saving procedures while fishing. Other notices were issued for not having certificates of inclusion, which permits the fishermen to take porpoises in association with the yellowfin tuna, and for failure to report as required.

The amount of a fine, which could run as high as $10,360, is determined by a complex formula based on points for procedural violations assessed against a skipper, the number of porpoises killed per set by the skipper, and a comparison to the fleet average of the number of porpoises killed per set.

Observations were made on 747 sets, of which more than 92 percent were carried out in compliance with the regulations. Lack of the required two manned speedboats to hold fishing nets open accounted for more than 73 percent of the violations.

The skippers may elect to pay a fine, request a hearing to seek relief, or accept a compromise fine through administrative procedures in lieu of a hearing.

Meanwhile, foreign fishermen now catching herring off the northeast coast will be permitted to take the full 21,000 metric tons quota originally established by the Secretary of Commerce.

This announcement followed by an order by the U.S. District Court in Portland, Maine, dismissing a suit brought by the State of Maine against Secretary of Commerce Juanita M. Kreps. The court found that the herring stocks in the area are not jeopardized because of foreign fishing, and that the preliminary fishery management plan approved by the Secretary permits an adequate growth rate for the depleted stock, while allowing enough herring to meet the catch capabilities of U.S. fishermen.

Extension Courses On Management Offered

American Management Associations offers extension courses in management education that can be taken independently, as in-company training or at local colleges.

Subject matter covers the five major divisions of business: general management skills, finance and control, manufacturing, computers and marketing.

Further information can be obtained from: American Management Associations, Extension Institute, 135 W. 50th St., New York 10020.

STATE FINANCES: 1976

(Thousands of dollars)

State	Revenue				Borrowing	Expenditure				
	Total	General	Insurance trust	Liquor stores		Total	General	Insurance trust	Liquor stores	Debt redemption
All States	**185,213,233**	**152,117,660**	**30,899,599**	**2,195,974**	**15,805,217**	**181,966,149**	**153,689,852**	**26,494,975**	**1,781,322**	**3,584,810**
Alabama	2,826,853	2,343,266	380,391	103,196	122,350	2,844,643	2,394,888	349,489	100,266	46,368
Alaska	1,188,279	1,042,880	145,399	—	142,941	1,032,889	957,387	75,502	—	21,250
Arizona	1,864,083	1,559,015	305,068	—	6,711	1,838,885	1,601,190	237,695	—	2,249
Arkansas	1,492,345	1,321,379	170,966	—	12,842	1,482,793	1,334,640	148,153	—	5,008
California	22,124,617	17,684,854	4,439,763	—	300,260	20,533,635	17,062,759	3,470,876	—	304,898
Colorado	2,167,903	1,870,802	297,101	—	1,050	1,996,742	1,810,630	186,112	—	3,198
Connecticut	2,678,703	2,009,383	669,320	—	454,650	2,651,232	2,003,395	647,837	—	313,255
Delaware	661,580	597,677	63,903	—	180,078	702,412	629,216	73,196	—	50,680
Florida	5,178,835	4,404,857	773,978	—	213,595	5,157,603	4,484,812	672,791	—	72,191
Georgia	3,357,513	2,923,103	434,410	—	203,170	3,324,401	2,857,552	466,849	—	68,399
Hawaii	1,330,484	1,105,529	224,955	—	295,000	1,381,535	1,222,569	158,966	—	99,603
Idaho	711,110	599,359	82,881	28,870	923	708,116	622,494	63,494	22,128	1,073
Illinois	9,148,441	7,627,067	1,521,374	—	704,557	9,477,017	7,934,310	1,542,707	—	138,755
Indiana	3,493,933	3,117,312	376,621	—	32,410	3,522,701	3,096,367	426,334	—	47,646
Iowa	2,314,349	1,989,590	222,602	102,157	3,270	2,346,284	2,076,253	197,022	73,009	4,610
Kansas	1,644,976	1,459,443	185,533	—	124,520	1,596,955	1,441,458	128,497	—	22,741
Kentucky	2,746,691	2,447,532	299,159	—	97,500	2,641,107	2,355,861	285,246	—	44,349
Louisiana	3,497,916	3,092,100	405,816	—	287,440	3,412,868	3,088,351	324,517	—	51,068
Maine	1,051,158	891,325	127,890	31,943	102,105	1,036,176	867,699	136,634	31,843	27,951
Maryland	3,590,346	3,169,262	421,084	—	537,605	3,861,429	3,447,523	413,906	—	124,866
Massachusetts	5,727,697	4,580,957	1,146,722	—	1,297,351	5,531,537	4,436,549	1,094,988	—	277,523
Michigan	8,803,753	6,581,172	1,894,778	327,803	312,908	8,711,398	6,819,143	1,614,096	278,159	166,878
Minnesota	4,090,202	3,580,367	509,835	—	135,245	3,840,302	3,481,150	359,152	—	49,576
Mississippi	1,836,834	1,593,180	169,317	74,337	189,515	1,825,708	1,643,157	122,733	59,818	29,283
Missouri	2,894,819	2,409,566	485,253	—	87,828	2,850,813	2,400,649	450,164	—	28,588
Montana	737,101	595,017	105,243	36,841	7,400	687,758	579,434	78,927	29,397	3,744
Nebraska	1,006,610	931,060	75,550	—	—	983,070	903,548	79,522	—	4,622
Nevada	689,035	481,996	207,039	—	3,200	589,920	470,885	119,035	—	2,686
New Hampshire	589,303	416,411	65,563	107,329	70,964	631,766	488,389	59,325	84,052	15,954
New Jersey	5,739,354	4,116,910	1,622,444	—	235,010	5,853,457	4,509,870	1,343,587	—	107,903
New Mexico	1,244,706	1,118,997	125,709	—	27,755	1,071,351	990,343	81,008	—	13,018
New York	21,022,373	17,253,780	3,768,593	—	6,314,753	21,027,229	17,719,231	3,307,998	—	396,571
North Carolina	3,874,953	3,361,552	513,401	—	206,083	4,165,676	3,718,894	446,782	—	40,955
North Dakota	649,692	601,290	48,402	—	2,955	575,856	537,055	38,801	—	2,892
Ohio	8,086,425	5,628,234	2,137,233	320,958	505,247	7,737,614	5,886,607	1,604,104	246,903	137,191
Oklahoma	2,032,489	1,864,403	168,086	—	10,803	1,968,534	1,767,550	200,984	—	22,921
Oregon	2,322,644	1,765,225	447,043	110,376	368,450	2,161,043	1,782,499	314,755	63,789	43,654
Pennsylvania	10,596,881	8,029,960	2,113,025	453,896	763,985	11,133,842	8,696,719	2,045,366	391,757	235,450
Rhode Island	1,007,025	747,171	259,854	—	57,241	980,430	762,317	218,113	—	44,495
South Carolina	2,162,617	1,906,935	255,682	—	164,857	2,265,776	2,033,467	232,309	—	46,126
South Dakota	496,264	456,777	39,487	—	7,856	492,032	470,359	21,673	—	1,242
Tennessee	2,643,189	2,300,555	342,634	—	216,107	2,807,698	2,433,396	374,302	—	63,501
Texas	7,942,919	7,283,743	659,176	—	210,405	7,386,147	6,830,937	555,210	—	75,261
Utah	1,118,467	945,206	136,476	36,785	70,000	1,072,396	950,058	97,953	24,385	6,725
Vermont	537,515	443,822	65,593	28,100	19,500	530,955	445,138	57,947	27,870	24,544
Virginia	3,648,728	3,182,346	282,708	183,674	93,115	3,551,768	3,149,793	248,215	153,760	87,435
Washington	3,976,086	2,958,917	857,558	159,611	89,681	3,638,718	2,852,148	663,617	122,953	53,386
West Virginia	1,771,748	1,459,898	240,611	71,239	164,066	1,726,426	1,449,550	222,632	54,244	52,109
Wisconsin	4,400,184	3,837,564	562,620	—	349,540	4,190,261	3,776,642	413,619	—	98,049
Wyoming	493,505	428,896	45,750	18,859	420	454,245	415,021	22,235	16,989	2,370

State Government Funds Closer To Balance In FY '76

State governments came closer to breaking even financially during fiscal 1976.

General state government revenue in 1976 increased 13 percent over the prior fiscal year to $152.1 billion, while their general expenditures increased only 11.1 percent to $153.7 billion.

Commerce's Bureau of the Census says these increases do not reflect total revenue and expenditure because unemployment compensation fund amounts were revised in 1976 to include special federally-financed programs administered through these funds, thus distorting comparison with prior years.

Taxes provided $89.3 billion, or 58.7 percent of total state general revenues. Included in the tax revenue were general sales and gross receipts taxes which provided $27.3 billion, followed by the sales tax on motor fuel, $8.7 billion. Tobacco sales tax collections were $3.5 billion, sales taxes on alcoholic beverages totaled $2.1 billion, and motor vehicle license taxes, $4 billion. The yield from individual income taxes, imposed by 44 states, totaled $21.4 billion, up 14 percent from 1975. Corporation net income taxes collected by states amounted to $7.3 billion in 1976, or 9.5 percent higher than the previous year.

The 50 states continued to spend more for education than for any other function. They spent $59.6 billion on education. Expenditure for public welfare totaled $29.9 billion, an increase of $4.1 billion, and spending on highways rose 3.5 percent to $18.1 billion. Spending for hospitals rose 10.2 percent to total $7.8 billion in 1976.

As indicated on the accompanying table, 36 states operated in the black during the year. Nebraska was the only state that did not resort to borrowing, but seven others paid more for retiring their debt than they got in fresh loans (Calif., Colo., Idaho, Iowa, Okla., Vt., Wyo.).

Single copies of the report, *"State Government Finances in 1976,"* GF76, No. 3, may be obtained for $1.40 from the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233, or from Commerce District Offices.

PRESIDENTIAL TASK FORCE CREATED TO HELP WOMEN BECOME BUSINESS OWNERS

A woman's place should be anywhere she chooses, including running her own business. But the barriers are formidable, and to ascertain what role the Federal Government may play in helping to remove those barriers, President Carter has established an Interagency Task Force on Women Business Owners.

The Task Force is comprised of representatives of the federal departments and agencies with a special interest in business and procurement issues. The appointees are: Anne Wexler, Deputy Under Secretary of Commerce for Regional Affairs, who will chair the Task Force; Patricia Mathis Harvey, Deputy Assistant Secretary for Administration, U.S. Department of the Treasury; Dale W. Church, Deputy Director of Defense Research and Engineering (Acquisition Policy), U.S. Department of Defense.

Also, Alexis Herman, Director of the Women's Bureau, U.S. Department of Labor; Arabella Martinez, Assistant Secretary for Human Development, U.S. Department of Health, Education and Welfare; Robert P. Graham, Commissioner of the Federal Supply Service, General Services Administration; and Patricia M. Cloherty, Deputy Administrator, U.S. Small Business Administration.

According to Secretary of Commerce Juanita M. Kreps, "Within its limited time frame, the Task Force will strive to develop an action plan for addressing the problems of women business owners that can be used for further Administration initiatives. It will do this by working closely with women entrepreneurs and other interested parties.

"A significant number of women have evidenced a strong desire to become entrepreneurs and to take their chances in the free enterprise system," she added. "But their chances are not good. Presently, women own less than five percent of American businesses, and these businesses generate only three-tenths of one percent of the total revenues for all firms."

The Task Force will report to the President within 120 working days of its first meeting, scheduled for early October, with its findings and recommendations for ways to ease the conditions that place women business owners at a competitive disadvantage. These may include proposing changes in federal law and regulations designed to encourage entrepreneurship among women and to enhance the Federal Government's ability to assist women.

Specifically, the Task Force is charged with:

- Identifying and assessing the adequacy of existing data on women entrepreneurs, identifying needs for additional information, and proposing methods of collecting it;
- Identifying the primary practices or conditions which discourage women from becoming entrepreneurs, which discriminate against them or place them at a competitive disadvantage.
- Assessing current federal programs and practices which discriminate or are designed to mitigate these conditions and practices, and
- Proposing changes in federal law, regulation and practice, and advising on the impact of such changes on the federal budget.

Commerce's Office of Minority Business Enterprise (OMBE) has been studying the need for a national directory of women business owners to identify them for private and government contractors. Secretary Kreps has said that "Commerce feels that such a national directory should be funded jointly by federal agencies, the private corporate structure and women's business interest groups."

The 1972 Census report on women-owned businesses was funded by OMBE, and Secretary Kreps has directed her staff to study the feasibility and funding requirements for issuing a similar report covering the year 1977. The Census Bureau will sponsor an all-day conference late this year or in early 1978 to address multiple concerns relating to women, including the problems faced by businesswomen.

Commerce's Economic Development Administration (EDA) is funding a pilot project by the American Women's Economic Development Corporation to help women start and expand their own businesses, and assist corporations, government and private agencies in increasing the responsibilities and economic opportunities for women.

Other federal agencies are also introducing programs to aid women in starting their own businesses. The Small Business Administration (SBA) will target $100 million for guaranteed business loans to women during the first quarter of Fiscal Year 1978 as part of its National Business Women's Ownership Campaign. Other SBA programs to be used in the campaign include advocacy, financial and management assistance, and assistance in securing contracts.

The Federal Trade Commission (FTC) will present a seminar on November 3 in Washington, D.C., for women corporate executives and business owners. The day-long workshop will clarify the role of the FTC and the kinds of advisory services it can provide for businesswomen. Particular attention will be focused on credit, including terms of the Equal Credit Opportunity Act, the Fair Credit Reporting Act and the Truth in Lending Act. Approximately 50 women, selected by female leaders in business and industry, will be invited to attend. The FTC hopes this seminar will be a model upon which other seminars may be planned and conducted by its regional offices.

Seminars For Businesswomen Scheduled Around Country

New York University is offering a series of seminars for women on management skills and starting and running a business, to be held in several cities.

Interpersonal Skills for Women Supervisors and Managers is a three-day seminar designed to provide the woman executive with a firmer understanding of her personal management style and her relationship with coworkers, including subordinates, peers and superiors. The program will highlight effective techniques for team involvement, issues that relate specifically to women, informal structure and support systems within organizations and how to develop an action orientation.

The seminar schedule is as follows: November 14-16, San Francisco; December 12-14, Houston; January 16-18, New York; and February 6-8, Chicago.

How To Start and Run Your Own Business will stress practical information for the would-be businesswoman, including computing cash needs, how and where to get funding, picking an attorney and accountant, understanding legal requirements, advertising techniques that promote profit at minimum cost, and other topics.

It is scheduled for December 11 in Chicago and February 16 in New York.

For further information, contact Heidi E. Kaplan, Dept. 14NR, New York Management Center, 360 Lexington Ave., New York 10017 (212-953-7262).

Decision Making On Products And Services Is Outlined

Product/Service Strategy provides a framework for decision making about all kinds of products and services, then shows how these decisions fit into the general marketing area. The book's approach is that there are certain fundamental concepts common to all products and services. New product development, life-cycle management and product elimination are all covered.

Emphasis is on current developments and modern decision-making techniques, and a detailed bibliography directs the reader to other sources of information.

Richard T. Hise, the author, is associate professor of marketing at Virginia Commonwealth University. *Product/Service Strategy* is priced at $13.50 for cloth edition, $9 for paper. Published by Petrocelli/Charter, the book is available from Van Nostrand Reinhold, 450 W. 33rd St., New York 10001 (212-594-8660).

49 STATES NOW HAVE LAWS ON UNFAIR TRADE

Recent action by Tennessee's legislature brought the total to 49 states and the District of Columbia which have enacted laws to prevent deceptive and unfair trade practices, reports the Federal Trade Commission. Alabama, which doesn't have such a law, has established a consumer complaint clearinghouse to facilitate actions under existing laws and possibly recommend new legislation.

The laws are of three basic types:

#1 Utilizes broad language from Section 5 of the Federal Trade Commission Act to prevent "unfair methods of competition and unfair or deceptive acts or practices" in trade or commerce. Fourteen states have adopted this option: Alaska, Connecticut, Florida, Hawaii, Illinois, Louisiana, Maine, Massachusetts, Montana, North Carolina, South Carolina, Vermont, Washington and Wisconsin;

#2 Reaches all forms of fraudulent, deceptive and sometimes unfair acts and practices in trade or commerce. Such laws have been adopted in Arizona, Arkansas, California, Delaware, Iowa, Kentucky, Maryland, Minnesota, Missouri, New Jersey, New York, North Dakota, Tennessee and West Virginia;

#3 Itemizes deceptive practices, usually with a "catch-all" clause to reach other forms of deception. Fifteen states use this coverage: Colorado, Georgia, Idaho, Indiana, Mississippi, Nevada, New Hampshire, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Dakota, Texas, Virginia and Wyoming. The Uniform Consumer Sales Practices Act, developed by the National Conference of Commissioners on Uniform State Laws, is similar in deceptive practice coverage to this third type of coverage, but extends also to unconscionable consumer sales practices. It, or a variation, has been adopted in seven jurisdictions: District of Columbia, Kansas, Michigan, Nebraska, New Mexico, Ohio and Utah.

Enforcement

The 50 laws mentioned above typically contain authorization for the administering or enforcement official to conduct investigations through use of subpoenas, to issue cease and desist orders, or obtain court injunctions to halt the use of anticompetitive, unconscionable, deceptive, or unfair trade practices.

Restitution may be obtained by the administering or enforcement official on behalf of aggrieved consumers in all but Alabama, Maine, West Virginia and Wyoming.

Civil penalties for an initial violation may be assessed in 29 jurisdictions: Alaska, Arizona, California, Connecticut, District of Columbia, Georgia, Hawaii, Illinois, Kansas, Kentucky, Maryland, Michigan, Minnesota, Mississippi, Montana, Nevada, New Hampshire, New Jersey, New Mexico, New York, Oregon, Pennsylvania, South Carolina, South Dakota, Texas, Vermont, Virginia, Washington and Wisconsin.

Class actions by consumers are authorized in 16 jurisdictions: Alaska, California, Connecticut, Indiana, Kansas, Massachusetts, Michigan, Missouri, New Hampshire, New Jersey, Ohio, Oregon, Rhode Island, Texas, Utah and Wyoming.

Private actions by consumers, sometimes including minimum recovery of $100 or $200, sometimes including double, treble, or punitive damages, and usually including costs and attorney fees, are authorized in the District of Columbia and all states except Alabama, Arkansas, Delaware, Iowa, Nevada, New Mexico, New York, North Dakota and Oklahoma.

Rules and regulations are authorized to be issued for implementing statutes similar to the FTC Act in 31 jurisdictions: Alaska, Colorado, Connecticut, Delaware, Florida, Georgia, Hawaii, Idaho, Illinois, Iowa, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Montana, Nevada, New Hampshire, New Jersey, New Mexico, North Dakota, Ohio, Oregon, Pennsylvania, South Carolina, South Dakota, Utah, Vermont, West Virginia and Wisconsin.

For further information, or to report changes or corrections in the above data, contact: Mr. Gale P. Gotschall, Counsel for Federal-State Cooperation, FTC, Washington, D.C. 20580 (202-523-3543).

ICC Urged To Encourage Carriers Making Special Arrangements For Shippers

The Department of Justice has urged the Interstate Commerce Commission (ICC) to be less restrictive in the licensing of carriers who seek to provide special contract services for shippers.

The Department's Antitrust Division filed comments with ICC supporting the application of Roll-On, Inc., for contract authority to transport horse meat for human consumption for the Great Western Meat Co. of Morton, Texas. An ICC administrative law judge had recommended denial of the application.

Acting Assistant Attorney General John H. Shenefield said ICC should encourage new applicants to meet special shipper needs, rather than honoring the protests of carriers who do not participate in the traffic to be carried, as the judge did in this case.

Shenefield argued that shipper satisfaction with the service offered by the applicant and willingness to continue to do business with the carrier should be given greater weight in a contract license proceeding than claims by other carriers. It would be particularly inappropriate, he said, for the Commission to deny this application because both the shipper and the carrier find the proposed arrangement acceptable and no one else could be harmed.

CAB Gets Green Light For New Method Of Setting Domestic Discount Air Fares

The Department of Justice has told the Civil Aeronautics Board (CAB) that its method of evaluating discount air fares should be discarded. The CAB agrees wholeheartedly.

The Board now assesses discount fares proposed by the airlines for trips within the 48 contiguous states on the basis of a "profit-impact test." To pass this test, the airline must convince the Board that the net revenues from the proposed fare will offset the added costs of carrying the new passengers it would generate. Moreover, any discount fare that is approved is limited to 18 months.

The CAB itself has proposed eight alternatives for public comment. John H. Shenefield, Acting Assistant Attorney General of the Antitrust Division, said he preferred the alternative that would permit carriers to offer any type of discount fare unless it were predatory or unjustly discriminatory, provided that "predatory" and "unjustly discriminatory" are narrowly defined.

"The current profit-impact test encroaches too severely on individual business management and decision-making and is essentially unnecessary since a rational business-person will seek to maximize profits and will not knowingly institute long-run below cost pricing schemes," Shenefield added.

Port Authority Booklet Lists N.Y. Container Terminals

The Port Authority of New York and New Jersey has published a new brochure containing detailed descriptions of all 12 containership terminals in the port.

The 16-page brochure provides individual full-color photos of the terminals, a tabulation of the specialized handling equipment and facilities available at each, as well as the name, address and phone number of each terminal operator. Maps locate railroad container yards and show the location within the port of all containership terminals and their proximity to major highways as well as railways.

Free copies are available when requested on company letterheads from the Port Promotion Division, One World Trade Center, Room 62W, New York, N.Y. 10048.

HOW CAN WE ECONOMIZE?—*Arthur C. Rutzen (second from right), Director of Commerce's New York District Office, questions GE official during demonstration of firm's mobile energy-saving exhibit. The 26-foot van can bring its message directly to an individual business and show how it can obtain the same lighting at lower cost.*

Specially-Equipped Van Takes Energy Conservation Message To Firms' Doorsteps

Commerce's New York District Office has reported a new technique which helps large users of electricity make substantial cuts in their energy use.

Business, commerce and industry, electrical distributors, contractors, and utilities throughout the New York City area—and seven other parts of the country—are learning how they can save electric energy and still get the lighting needed for productivity, safety and security as part of a nation-wide lighting education program of the General Electric Company. And the bringer of these glad tidings will roll right up to a business's doorstep.

The energy saving message is being brought to lighting users in GE's Lamp Progress Express. Top District Office personnel recently took a briefing trip on this 26-foot long mobile van, which is specially-outfitted with animated displays and demonstration units showing how large amounts of electric energy can be conserved and operating costs reduced by switching to more efficient lamps.

The van contains a computer terminal that can determine the most energy-efficient and cost-efficient lighting system and the lowest cost life-time system for any building, store, or company, large or small.

"We can drive the Lamp Progress Express right up to a customer's business, invite the top executives in, get all of their information on what type of lighting they use and their current operating costs," explains Robert T. Dorsey, GE's manager of lighting technology development. And then we feed this into our computer center and get a complete printout showing which lamps will produce the lowest total cost of light and the maximum energy saving without sacrificing lighting quality or quantity."

Dorsey estimates that if all of the 150,000 recessed fixtures in hotels, motels, offices, stores, restaurants and schools throughout the New York City area now using 150-watt reflector floodlamps were switched over to a new 75-watt lamp with the same light output, this could save 45 million kilowatt hours of electric energy per year, representing a cost saving of more than $2.5 million.

He also says that if all of the 28.5 million fluorescent sockets in New York City now using standard 40-watt fluorescent lamps were changed over to new reduced wattage lamps producing the same amount of light, this could save 798 million kilowatt hours of electric energy per year, representing a cost savings of $44.7 million.

One of the van's exhibits shows that, while the initial cost of an ordinary 100-watt light bulb is only 30¢ compared with $1 for a 40-watt fluorescent lamp, $9 for a mercury lamp and $28 for a 400-watt high-pressure sodium lamp, the total cost of producing an equal amount of light over a 24,000 hour period soars to $3,136 for the incandescent compared with $733 for the fluorescent, $832 for the mercury and only $437 for the more efficient high-pressure sodium lamp.

The New York City van is one of eight that will cover the entire United States during the next two years as part of an intensive lighting education program.

Conference Discusses Effects Of Incentives, Improved Job Satisfaction On Productivity

Getting employees to work smarter, not harder, is the theme of a conference on Quality of Working Life and Productivity scheduled for October 27 at New York's Biltmore Hotel. Sponsors for the day-long event are the Work in America Institute and the National Center for Productivity and Quality of Working Life.

Panel discussions will show how improved job satisfaction produced increased productivity for two companies: the General Motors Assembly Division plant in North Tarrytown, N.Y., and the Guardian Life Insurance Company of New York City. The GM plant had been plagued with poor work quality, absenteeism and grievances. A Quality of Working Life program was instituted and the results reviewed over a three-year period. A dramatic turnaround in employee performance, morale and productivity has followed.

In the case of Guardian, its predominately female workforce indicated they wanted more meaningful, challenging work. A management consulting firm led the company to improved working conditions for its employees and improved service for its clients.

The luncheon speaker will be Dr. Michael Maccoby, author of *The Gamesman* and director of the Harvard Seminar on Science, Technology and Public Policy.

Three plans that are reputed to have created higher profits and lowered unit costs by providing greater employee incentives were the focus of a one-day conference on Sharing the Gains of Productivity, presented September 20 in New York City by the same sponsors.

Improshare, the Scanlon Plan and profit-sharing systems have been implemented in a great many organizations across the country in recent years. Some of the reported results:

—Among corporations on the New York Stock Exchange, pretax profits for companies using executive incentives were significantly higher than for non-incentive companies;

—In some 400 organizations, when non-executive incentives were introduced, production rose by as much as 57 percent above previous standards.

Further information about the conferences can be obtained from the Work in America Institute, 700 White Plains Road, Scarsdale, N.Y. 10583 (914-472-9600).

METRO GOVERNMENTS EMPLOY 4.8 MILLION

Local governments in the nation's 74 largest Standard Metropolitan Statistical Areas (SMSA's) employ 4.8 million persons and have payrolls of $4.6 billion, according to Commerce's Bureau of the Census.

While these largest SMSA's contain only 18.3 percent of all local governments in the United States, they accounted for 54 percent of all local government employees and 62 percent of their payrolls, according to an October 1976 survey. However, 54 percent of the U.S. population resided in these major SMSA's in 1975.

These areas contained more than 14,300 local governments, ranging from a low of four in Honolulu to 1,172 in Chicago.

About one-half of the full-time equivalent employment (2.1 million workers) was in education, and 1.4 million of these were classified as teachers. The following ten functions ranked in order of full-time equivalent employment were: police protection—305,000; hospitals—241,000; local utilities—211,000; general control—154,000; fire protection—136,000; highways—124,000; public welfare—117,000; parks and recreation—101,000; financial administration—73,000; and sanitation other than sewerage—72,000.

There were 358 employees per 10,000 of population in the 74 SMSA's in 1976 compared with 337 per 10,000 for local governments outside these metro areas. The difference is due partly to the fact that demands for services such as mass transit, police and fire protection, sanitation, and health are greater in areas of high population density.

The report includes local government employment and payroll data for 18 governmental functions in each of the 74 major SMSA's, and their component county areas, and in 68 counties with populations of more than 200,000 outside the 74 SMSA's.

Copies of *Local Government Employment in Selected Metropolitan Areas and Large Counties: 1976*, are available for $2.15 from the Subscriber Services Section (Publications), Bureau of the Census, Washington, D.C. 20233, or from Commerce District Offices.

Machine Helps Pinpoint Where Heat Leaves Homes

Commerce's Dallas District Office reports that the Texas Power & Light Company has developed a portable unit which can create a vacuum within a house, and help reveal where heated or air conditioned air is leaking out of the building.

Outside air rushes into the house to fill the vacuum at the rate of 30 m.p.h., and the company has also modified instruments to test this air filtration through electrical fixtures, doors, windows, duct system, fireplaces, light fixtures and vents. The machine has been used to check more than 40 residences in the Dallas area.

Results indicate that 25 percent of all leakage occurs at the soleplate, where the frame of the house joins the foundation. Wall outlets were the second leakiest, with 20 percent. Others were: duct system (13), exterior windows (13), vents (9), fireplace (6), recessed spotlights (5), exterior doors (4), sliding glass door (2), bath vent (1) and other (2).

Justice Finds No Anti-Trust Problems With Proposed Copyright Clearance Center

The Department of Justice will not raise anti-trust objections to a proposal by the Association of American Publishers to establish a non-profit Copyright Clearance Center.

The proposed center, which is to begin operation in January, will receive copyright license fees from libraries and others that reproduce journal articles and other short works, and will transmit those fees to the copyright owners.

The center will not be involved in copyright licensing decisions. Individual copyright owners will decide which articles to put into the system and the fees for licenses to copy their works.

Copyright owners will be free to negotiate separate licensing agreements with users, outside the system. The center's services are to be available to all users and copyright owners.

ICC Task Force To Study Illegal Rail, Motor Rates

The Interstate Commerce Commission has formed a task force of enforcement attorneys, investigators, and auditors to undertake a nationwide investigation and prosecution of rail and motor carriers engaged in illegal rate practices.

The ICC has been concerned with concessionary rate practices within the surface transportation industry, and has stated that elimination of such practices is a high priority matter.

Investigators will undertake concentrated investigations throughout the nation in such areas as rebates, credit violations concessionary real estate transactions, unlawful entertainment expenditures, free construction of trackage on shippers' property, as well as demurrage and detention matters.

Beyond investigating rail and motor carriers, the task force will also investigate practices of shippers associations, as well as the operations of certain port cities. Task force attorneys will be in close communication with the Department of Justice, as well as with state and local law enforcement agencies.

THREE NEW PATENT DEPOSITORIES NAMED

The task of bringing America's technical knowledge to the people has been simplified by the addition of three new libraries as Patent Depositories.

A Patent Depository is a public library which has and maintains a collection of U.S. patents and which, in cooperation with the Patent and Trademark Office, offers services to the public in using this collection.

Addition of the Birmingham Public Library in Birmingham, Alabama, Fondren Library of Rice University in Houston, and The University of Washington Engineering Library in Seattle brings the total of such depositories located around the country to 25. They are located in most major metropolitan areas.

The Patent and Trademark Office has granted over four million patents, with some 70,000 to 80,000 being added each year. Without these depositories, anyone desiring to make a search through the patent collection would have to come to the Public Search Room of the Commerce agency's headquarters located in Arlington, Virginia.

Other depository designations may be announced early in 1978.

Report Details Windows' Role In Energy Saving

A room with a view is no longer as important as a room with energy-saving windows.

The selection and design of windows is a major factor in determining a building's energy consumption, points out a new study from Commerce's National Bureau of Standards.

Written by S. Robert Hastings and Richard W. Crenshaw of the NBS Center for Building Technology, the publication provides 33 design strategies for conserving energy through use of windows.

Opportunities for improving window performance are divided into six groups: site, exterior appendages, frame, glazing, interior accessories, and building interior. The study explains the physical phenomena responsible for each strategy's energy performance. The authors also summarize the advantages and disadvantages of each strategy and make cost approximations for implementing each. Example installations and laboratory studies showing specific energy savings are also provided.

The 209-page publication, *Window Design Strategies to Conserve Energy* (Building Science Series 104), is available for $3.75 a copy from the Superintendent of Documents, GPO, Washington, D.C. 20402. Use S.D. Stock Number 003-003-01794-9 when ordering.

LEARNING A TRADE—*Students at the International Career Institute in New York learn drafting and design under the instruction of Jorgens Moller (center). School president and co-owner Rose Mason (left) worked to win accreditation for the school.*

Minority-Run Career School Achieves Accreditation

Winning its accreditation marked a major milestone for the International Career Institute, Inc. (ICI), a minority-owned and operated school in downtown Manhattan. With the help of the First Harlem Management Corporation, an organization funded by Commerce's Office of Minority Business Enterprise (OMBE), the school capped a three-year effort to gain accreditation.

ICI was formed in 1974 as an extension of the Academy of Designing, an institution in existence since 1901. In addition to teaching the fashion design, sewing and dressmaking of the Academy, ICI teaches English and remedial English to both American and foreign students, and commercial and secretarial studies. It also prepares students for high school equivalency examinations.

The owners of ICI, a profit making business venture, are Rose Mason, president and dean, who is black; Charles Sanchez, secretary/treasurer and registrar, an American of Spanish descent; and Andrew Edelman, vice-president and director, who is white.

The school prides itself on giving its students more than just career training . . . stressing scholarships, tutoring and advice on financial and family problems as well.

First Harlem is one of more than 200 OMBE-funded organizations around the country that provide cost-free assistance to present and potential minority entrepreneurs. When ICI first turned for help to First Harlem, the school was losing money and enrollment was down. First Harlem helped the school develop its management and technical ability to turn it into a thriving business that at the same time provides a valuable service to the community.

U.S. Hunters In Other Nations Must Observe Laws Of Both

American sportsmen and hunters visiting Canada or Mexico to hunt or fish must comply with the game laws of both the U.S. and the host country.

The U.S. Customs Service reminds hunters and fishermen that wildlife taken or killed in violation of the laws of the native country, including state and provincial regulations, cannot enter the United States. Certain game may be lawfully exported from Mexico and Canada only under permits issued by the host nation.

In addition, U.S. law prohibits the entry of specimens of certain endangered species of fish and wildlife.

Lawfully-taken Canadian and Mexican game or game trophies may enter the U.S. in legal quantities at any Customs port of entry when the individual declarant submits Customs form 3315, "Declaration for Free Entry of Game Animals or Birds Killed by U.S. Residents."

Game animals, migratory game birds, or fish caught or killed abroad for noncommercial purposes are duty free.

American Indians Trained To Manage Energy Resources On Western Reservations

American Indians, whose reservations in the Western states are situated on lands containing a wealth of energy resources, are receiving help from the Federal Government in learning how to manage those lands.

Energy resources of Indian reservations are estimated to include one-third of the country's low-sulfur coal, most of its uranium, and large deposits of oil and natural gas. The Native Americans want to ensure a fair return on the resources they own, preserve the environmental integrity of their lands, and maintain the long-term stability of their social structure.

Grant should create jobs

Commerce's Economic Development Administration has awarded a $102,150 grant to help conduct a program that should stimulate growth and create jobs on Indian reservations. The funds will be used by Americans for Indian Opportunity, Inc., of Albuquerque to help pay the costs of conducting research and preparing training seminars for local management of natural resources on Indian reservations.

The program's goal is to train tribal leaders to negotiate leases for the development of energy-related resources on reservations and for administrative roles in the projects.

Five reservations will be selected for study and research. Americans for Indian Opportunity will provide $51,175 to complete the total cost of the project for one year.

Another government agency, the Energy Research and Development Administration (ERDA), is teaching American Indians techniques for land reclamation, conservation and resource development. The Energy Resource and Reclamation Training Program was developed last year by ERDA's Argonne (Ill.) National Laboratory at the request of Navajo and Hopi Indians in Arizona.

It proved successful and is being repeated this year. In addition, a similar program was introduced in Montana, consisting of six weeks of technical instruction during the summer for 19 students chosen by their tribal councils. Seven of the participants in the Montana program will attend a month of more intensive training at Argonne in the fall. Some of the students will receive college credit for their work.

Argonne Laboratory scientists and engineers are instructors in a curriculum that includes ecology, geology, range and wildlife management, soil science, agronomy and land reclamation techniques.

BETTER ENERGY IDEAS GET TOP PRIORITY FOR NEEDED MATERIALS

The U.S. is taking steps to make sure that people with good energy-saving ideas get access to the supplies they need to put them into practice.

A system of priority ratings to obtain scarce materials and equipment for projects that will maximize domestic energy supplies will be explained at a series of seminars conducted jointly by Commerce and the Federal Energy Administration this fall.

The seminars have been scheduled for:

Oct. 6—Atlanta Civic Center, 395 Piedmont Ave., NE., Atlanta;

Oct. 18—McCormick Inn, 23rd and Lake Shore Drive, Chicago;

Oct. 20—Hollenden House Hotel, East Sixth and Superior, Cleveland;

Nov. 3—Departmental Auditorium, Constitution Ave., NW. (between 12th & 14th Sts.), Washington, D.C.;

Nov. 17—Braniff Place, 1500 Canal St., New Orleans.

The seminars are designed primarily for energy industry executives, but are open to all. Seminar leaders will explain the procedures for obtaining priority ratings for energy projects and for the materials and equipment to be used in building and operating them.

The use of priority ratings was legislated originally under the Defense Production Act of 1950 to assure that projects vital to the national defense obtained needed materials and equipment in a timely fashion.

The Energy Policy and Conservation Act of 1975 extended that system to include activities designed to conserve or increase supplies of domestic energy.

There will be no charge for the half-day seminars which begin at 9 a.m. Prospective attendees should call or write Ellen Gay Baker or Heather MacLeod, Materials Allocation Office, Federal Energy Administration, 12th St. and Pennsylvania Ave., NW., Washington, D.C. 20461; (202-566-7575).

Further information is available from the same source.

Tucson Conference Views World Energy Picture

A major International Conference on Energy Use Management is expected to attract representatives of energy-related organizations from throughout the world to Tucson, Arizona, next month.

Commerce's Office of Energy Programs has helped organize the conference, and a Department representative will lead a panel discussion on energy accounting and information systems.

The Oct. 24-28 conference hopes to:

Promote efficiency in the end-use of energy by providing an international forum for the exchange of information, strategies, and experiences, and;

Demonstrate and disseminate information on practical solutions and approaches by providing for a commercial exhibit and a community workshop.

Energy related topics to be discussed include: industry and commerce; residences; transportation and communication; agriculture and food; industrialization; development; engineering, architecture, land use and urban planning; the natural environment; the role of government; and societal and economic aspects.

Inquiries regarding the technical program may be addressed to: Dr. Rocco A. Fazzolare, Energy Systems Engineering Program, Building 20, Univ. of Arizona, Tucson, Ariz. 85721.

STUDY EYES PROSPECT OF SAVING WINTER CHILL FOR SUMMER COOLING

During future summers passengers and employees at New York's JFK International Airport may be able to enjoy air conditioning supplied by drawing some of the previous winter's chill from "storage."

If the scheme is successful, many major air conditioning and industrial cooling systems throughout the nation may be able to cut electricity usage by as much as 90 percent.

Plans are being developed for a system to store the chill from the harsh Long Island winters. This chill could be used later to air-condition buildings in the JFK terminal, thus saving large amounts of electrical energy.

The winter chill would be stored in an aquifer—a natural underground reservoir—which is known to exist in rock strata beneath the airport grounds.

Several wells would be drilled into the aquifer. During the winter months groundwater would be pumped from the aquifer and passed through cooling towers where it would absorb chill from the air. The cold water would then be returned to the aquifer for storage.

During summer this cold water would be pumped from the aquifer and used to chill circulatory fluid in the airport's air conditioning system. This process could be repeated each season.

Researchers estimate that the system could reduce the amount of electricity needed to cool the terminal complex by as much as 90 percent.

If the study proves as successful as anticipated the approach could potentially apply to all large air conditioning and industrial cooling systems that are located in areas having cold winters and hot summers, and where aquifers are available.

Booklet Gives Energy Saving Tips For Nation's Auto Repair Shops

The Automotive Service Council (ASC) and the Federal Energy Administration have compiled a guide that informs owners of the nation's 130,000 auto service and repair firms how they can save up to 30 percent in energy costs.

ASC, a national association of independent garage owners, auto body shops and auto specialty shops, will publish the guide, distribute it to its membership and make it available to others in the industry.

The 21-page guide, *Energy Cost Reduction for Automotive Service Facilities*, explains 15 measures which businesses can take to accomplish significant energy savings.

Measures are presented in terms of the potential payback in savings on energy bills. This payback is always approximately one year or less. The measures range from repairing leaks in compressed air systems to relamping.

Examples cited include a repair shop in California which reduced excess night security lighting at a cost of $25 for rewiring and saved $150 in the first year. The potential 10-year savings are $2,200.

Another shop, in Illinois, repaired wall cracks and air leaks around doors, spending $100 to accomplish the repairs. In the first year, savings were $150 for a payback period of eight months and a 10-year potential savings of $2,600.

Tennessee Community Gets Funds For Energy Building

A $160,000 community grant will help construct a multi-purpose utility building providing space to test new industrial energy sources in Lawrence County, Tennessee.

Commerce's Economic Development Administraton approved the grant to the City of Lawrenceburg, which will construct the building in a city industrial park to serve a variety of purposes.

Among its uses, officials report, will be providing space to verify a process of producing natural gas through the hydrolysis of carbides resulting from a conversion of coal. The project represents a follow-up to laboratory experiments.

The city is hoping to develop the alternate sources of energy needed to serve existing industries and attract new firms that can produce jobs.

ICC Bans Extra Trucker Charges For Home Deliveries, Is Asked To Drop End Runs

The Interstate Commerce Commission has adopted new pro-consumer rules which prohibit trucking companies from charging higher prices for transportation service to private residences than for corresponding service to businesses.

The new rules result from a two-year, industry-wide investigation initiated by the Commission's Bureau of Traffic in response to complaints from consumers.

The investigation revealed that almost all carriers were assessing charges for pickup and delivery service to private homes, apartments, churches, schools, camps, and other non-business locations. In some instances, the pickup and delivery charges assessed only to non-business customers were higher than the transportation charges themselves.

The Commission found these extra charges unreasonable and ruled that the carriers can no longer collect them. The new rules also require carriers to make arrangements with non-business receivers for a mutually-agreeable delivery time.

The new rules do not affect shipments moving by United Parcel Service and certain other parcel express companies because their services do not traditionally involve extra charges for residential deliveries.

In a related development, the Department of Justice has asked the ICC to eliminate regulations requiring interstate truckers to follow circuitous routes between points they are authorized to serve.

Allowing truckers to operate on the shortest routes would increase competition in the trucking industry, reduce the annual mileage traveled by trucks by as much as 233 million miles, and save up to 51 million gallons of fuel and $139 million in transportation costs annually, according to Justice.

ICC has generally required that motor carriers use the exact routes specified in their certificates of public convenience and necessity.

Thus, a carrier with a certificate authorizing service from Cincinnati to Indianapolis (108 miles) and another for service from Indianapolis to Louisville (114 miles), but with no certificate for direct service between Cincinnati and Louisville (113 miles), can lawfully provide such service only by carrying the cargo through the Indianapolis "gateway"—a route 109 miles longer than the direct route between the two cities.

In recent years, the ICC has adopted a limited exception to this rule. Justice recommends that it be done away with entirely over the next five years.

Less Paper Work Now For Retirement Tax Report

The Internal Revenue Service will require less information reporting of Individual Retirement Arrangement (IRA) sponsors.

Form 5498 (*Statement of Account for Participants in Individual Retirement Accounts or Annuities*) and Form 5499 (*Annual Summary and Transmittal of Individual Retirement Arrangement Statements*) are no longer required. However, additional information will be reported on Form 1099-MISC (*Statement for Recipients of Miscellaneous Income*).

Beginning in 1978, sponsors will furnish participants with a full account of the IRA by June 30 following the close of the participant's tax year. This will allow sponsors time to account for contributions made 45 days after the close of the participant's tax year, and withdrawal of excess contributions before the due date of the participant's tax returns as provided by the Tax Reform Act of 1976.

Calendar Of Business Events

Sept. 30 — Suitland, Md. — Workshop on Uses & Applications of Census Bureau Data to Meet Current Legislative & Administrative Requirements, Census Bureau. Contact: User Training Branch, Data User Services Div., Census Bureau, Washington, D.C. 20233 (301-763-5293).

Sept. 30 — San Juan, P.R. — Government Contracts Seminar, Caribe Hilton Hotel. Contact: Federal Bar Assn., 1815 H St. NW., Suite 420, Washington, D.C. 20006 (202-638-0252).

Oct. 2-4—Dundee, Ill.—Low-Btu Gas: Its future, Chateau Louise. Contact: Wendell Waterman, Institute of Gas Technology, 3424 S. State St., Chicago, Ill. 60616 (312-567-3719).

Oct. 2-4—The Woodlands, Tex.—Alternatives to Growth 1977 Conference. Contact: Alternatives to Growth, c/o SID—Room 1131, 1346 Connecticut Ave. NW., Washington, D.C. 20036 (202-296-3810).

Oct. 3-4—Philadelphia—Management Introduction to EDP, Drexel U. Contact: Drexel U., 32nd & Chestnut Sts., Philadelphia, Pa. 19104 (215-895-2154).

Oct. 5-7—Philadelphia—Management Skills for Women & Minorities, Drexel U. Contact: Drexel U., see address above.

Oct. 5-7—New York—Fundamentals of Data Processing for the Non-Data Processing Executive, American Mgt. Associations Headquarters. Contact: AMA, 135 W. 50th St., New York 10020 (212-586-8100).

Oct. 6—Hartford, Conn.—Federal Procurement Conference, Hartford Holiday Inn. Sponsor: Rep. William R. Cotter. Contact: David McQuade, c/o Rep. Cotter, 450 Main St., Hartford, Conn. 06103 (203-244-2383).

Oct. 6-7—Philadelphia—Production Planning & Inventory Control, Drexel U. Contact: Drexel U., see address above.

Oct. 10-13—Tulsa—Marketing & Design/Build/Lease seminars for the Construction Industry, Sheraton Inn Skyline East. Contact: Walter Johnson, Group Communications, Inc., 6101 SW. Freeway, Suite 401, Houston, Tex. 77057 (713-664-8818).

Oct. 11—Houston—Reducing Energy Costs Through Energy Mgt., Section II, University Center, U. of Houston. Cosponsors: Commerce Houston District Office & Energy Institute of U. of Houston. Contact: Commerce Office (See cover III).

Oct. 11-12—Gaithersburg, Md.—Materials for Coal Conversion & Utilization contractors meeting, National Bureau of Standards. Sponsors: Energy Research & Development Administration, Electric Power Research Institute & NBS. Contact: S. J. Schneider, B308 Materials Bldg., NBS, Washington, D.C. 20234 (301-921-2893).

Oct. 11-12 — Raleigh, N.C. — Governor's Conference on Fishery Mgt. Under Extended Jurisdiction, Sheraton/Crabtree Motor Inn. Contact: Conference, c/o Office of Marine Affairs, 116 W. Jones St., Raleigh, N.C. 27603.

Oct. 11-13—Rosemont, Ill.—Chicago Area Engineering Conference and Tool & Mfg. Exposition/Sheet Metal USA, O'Hare Exposition Ctr. Contact: Society of Manufacturing Engineers, P.O. Box 930, Dearborn, Mich. 48128 (313-271-1500 ext. 340).

Oct. 11-14—Boston—Contract Administration & Management, Logan Hilton Hotel. Contact: American Graduate University/Procurement Associates, Inc., 733 N. Dodsworth Ave., Covina, Calif. 91724 (213-331-5484).

Oct. 11-14—New Orleans—13th Meeting of Computer Performance Evaluation Users Group, Fontainebleau Hotel. Sponsor: National Bureau of Standards. Contact: Dennis Conti, A265 Tech. Bldg., NBS, Washington, D.C. 20234 (301-921-3485).

Oct. 17-18—Arlington, Va.—Termination for Convenience & Default, Crystal City Marriott Hotel. Contact: American Graduate University/Procurement Associates, Inc., see address above.

International Commerce Report

U.S. Manufactures: Export Share Declines Sharply

FIRST QUARTER DECREASE MAINLY RESULT OF BROAD CHANGES IN DELIVERIES OF TRANSPORT EQUIPMENT

The U.S. share of world exports of manufactures, excluding shipments to this country, declined sharply in the first quarter of 1977 in contrast to the small increase in the final three months of last year. At 19.9 percent, the U.S. position stood at its lowest level in nearly three years.

The decrease in the U.S. standing, shown in the accompanying table, was mostly attributable to a large, four percentage point drop in the share of transport equipment export value. If share movements for transport equipment were excluded, the offsetting changes among the remaining commodity groups would leave the U.S. position virtually unchanged. Among these other groups, the U.S. share fell somewhat in non-electric machinery, was unchanged in electric machinery and miscellaneous manufactured articles, and increased modestly in chemicals and basic manufactures.

The value of U.S. exports of manufactured goods fell in the first quarter of 1977 after a moderate increase in the previous three-month period. Shipments by the other 14 major manufacturing nations, adjusted for seasonality and exchange rate changes, rose about four percent in January-March. French, German, and Italian growth slowed significantly from the rates of the previous quarter. Contrary to this general trend, the United Kingdom, Denmark, and Japan, with growth rates of 9-14 percent, accelerated their deliveries.

The largest U.S. share decline occurred in transport equipment where it fell from 26.4 percent to 22.3 percent. Share changes in this commodity group are typically more volatile than in other product areas, and shifts of such large magnitude have become more frequent in recent years. In this particular quarter, the drop in the U.S. standing resulted largely from a decrease of more than $0.5 billion in U.S. deliveries of civilian aircraft. Partly offsetting this decline, U.S. shipments of motor vehicles to Canada rose moderately, although those to other countries slipped from their previous levels. Concurrently, transport equipment exports by other major suppliers were generally buoyant, especially those of Germany and Japan.

The only other reduction in the U.S. standing was a modest decline in the share of nonelectric machinery exports to 26.3 percent. While exports of these products by the other suppliers as a group grew slowly, buoyed by those of Switzerland, the United Kingdom, and Denmark, U.S. sales abroad showed little change from the previous quarter. Greater deliveries of U.S. computers and parts and heating and cooling equipment were accompanied by reduced shipments of construction and mining equipment and nonagricultural tractors.

NEW REPORT EXPLAINS UPCOMING U.S. TRADE CLASSIFICATION CHANGES

A special report, *1978 Changes in U.S. Foreign Trade Classifications and Publications*, just released by Commerce's Bureau of International Economic Policy and Research, describes in detail the extensive changes which will become effective in U.S. foreign trade statistics beginning with data for 1978. Exporters and other users of trade data will find the report valuable to assess the effect of the changes on their analyses of detailed, as well as broad summary, trade movements.

In January, the Census Bureau will begin to use new and/or revised commodity classifications for U.S. exports and imports, and will implement a decision to tabulate import documents to the extent possible for the actual month of importation rather than the date of filing (entry). This first major change in the classification of U.S. trade in 12 years will make difficult precise comparisons of 1978 trade with those from earlier years for commodity exports and imports as well as for country-by-commodity trade.

The entirely new Schedule B export commodity classification and the partially revised Tariff Schedules of the U.S. Annotated (TSUSA) import classification result from efforts to achieve better comparability of export, import, and production data, as required by the Trade Act of 1974.

The Foreign Trade Division of the Bureau of the Census recently notified exporters that the new 7-digit commodity export code will be effective for identifying products on export declarations as of Jan. 1, 1978. Copies of the new Schedule B will be available about Oct. 20 from the U.S. Government Printing Office for $13.

Extensive changes will also occur in the export and import classifications based on the United Nations' Standard International Trade Classification (SITC) which are widely used for summarizing U.S. commodity trade into meaningful groupings. Both the new Schedule E export and the revised Schedule A import commodity classifications will be based on Revision 2 of the SITC which the United States will adopt beginning Jan. 1. The report provides estimates of changes in the valuation of exports and imports by broad categories as a result of that shift. Further, it presents lists of commodity categories at a more detailed level which will no longer correspond with those in the classification used through 1977.

The 38-page report is available to those requesting it without charge. Copies may be obtained from the International Trade Analysis Staff, Room 5618, Department of Commerce, Washington, D.C. 20230.

Anti-Boycott Regulations

Proposed regulations implementing the anti-boycott provisions of the Export Administration Amendments of 1977 were to be announced just as this issue went to press. An article explaining these regulations will be published in a forthcoming *Commerce America.*

U.S. SHARE OF WORLD EXPORTS OF MANUFACTURES

Adjusted for seasonal variation

Commodity	U.S. exports (million dollars)	U.S. share* (% based on export-weighted exchange rates[1])
Manufactures, total		
1975	72,118	21.2
1976	78,526	20.5
1975 1st qtr.	17,339	20.6
2nd	17,668	20.4
3rd	18,371	21.9
4th	18,880	21.7
1976 1st	18,510	20.5
2nd	19,578	20.6
3rd	19,956	20.3
4th	20,419	20.6
1977 1st	20,002	19.9
Chemicals		
1975	8,746	20.1
1976	10,032	20.6
1975 1st qtr.	2,336	20.1
2nd	2,097	19.4
3rd	2,080	20.5
4th	2,248	20.5
1976 1st	2,344	20.3
2nd	2,589	21.1
3rd	2,494	20.2
4th	2,605	20.8
1977 1st	2,694	21.1
Nonelectric machinery		
1975	21,088	27.8
1976	22,199	26.8
1975 1st qtr.	4,940	28.4
2nd	5,311	27.0
3rd	5,339	27.7
4th	5,504	28.1
1976 1st	5,350	26.8
2nd	5,545	26.9
3rd	5,555	27.0
4th	5,687	26.6
1977 1st	5,654	26.3
Electric machinery		
1975	7,771	22.3
1976	9,509	23.3
1975 1st qtr.	1,862	22.2
2nd	1,929	22.0
3rd	1,955	22.6
4th	2,021	22.4
1976 1st	2,147	22.7
2nd	2,332	23.3
3rd	2,506	23.8
4th	2,507	23.4
1977 1st	2,511	23.4
Transport equipment		
1975	17,281	27.8
1976	18,334	25.1
1975 1st qtr.	3,854	26.8
2nd	4,126	26.3
3rd	4,714	30.3
4th	4,673	28.1
1976 1st	4,134	24.5
2nd	4,577	25.5
3rd	4,776	23.9
4th	4,904	26.4
1977 1st	4,320	22.3
Basic manufactures		
1975	11,230	12.5
1976	11,513	11.9
1975 1st qtr.	2,835	12.0
2nd	2,747	12.0
3rd	2,791	12.9
4th	2,887	13.2
1976 1st	2,873	12.6
2nd	2,846	11.8
3rd	2,882	11.7
4th	2,886	11.5
1977 1st	2,984	11.7
Miscellaneous manufactured articles		
1975	6,002	17.3
1976	6,939	17.1
1975 1st qtr.	1,512	17.6
2nd	1,458	16.9
3rd	1,492	17.4
4th	1,547	17.4
1976 1st	1,662	17.3
2nd	1,689	17.1
3rd	1,733	17.0
4th	1,830	17.0
1977 1st	1,839	17.0

Note: 1976 share data for the third and fourth quarters and the year are revised. Figures for 1976 and 1977 are preliminary. The term "manufactures" refers to chemicals, machinery, transport equipment, and other manufactures except mineral fuel products, processed food, fats, oils, firearms of war, and ammunition. World exports are defined as exports from the 15 major industrial countries. Percentage shares are based on values excluding shipments to the United States. These nations, which account for 80 percent of world exports of manufactures to foreign markets, are: United States, Austria, Belgium-Luxembourg, Canada, Denmark, France, Federal Republic of Germany, Italy, Netherlands, Norway, Sweden, Switzerland, United Kingdom, and Japan.

* Of world exports to foreign markets.

[1] Export-weighted exchange rate indexes are calculated for each supplier in each period, using official rates of exchange *vis-a-vis* 67 principal markets.

The electric machinery share of 23.4 percent reflected marginal changes in shipments from both the United States and other suppliers except for significant rises of exports from Sweden and the United Kingdom. In miscellaneous manufactured goods, the U.S. position remained unchanged for the third consecutive quarter at 17 percent. Exports by this country advanced modestly, buoyed by larger sales of scientific instruments and clothing. Shipments from most of the other suppliers also increased slowly, but those of the United Kingdom and France climbed to a significant extent.

In basic manufactures, which includes semimanufactures of various materials, the U.S. position rebounded slightly to 11.7 percent. U.S. exports rose modestly, however, as increased sales of rubber and textiles were partly offset by lower shipments of steel and nonferrous metals. Among the other leading suppliers, the largest advances were from the United Kingdom and Japan while exports from Germany declined somewhat.

The largest U.S. share increase was in chemical exports, rising from 20.8 percent to 21.1 percent. U.S. deliveries climbed moderately and only Denmark, Canada, and the United Kingdom, among our major competitors, exceeded the U.S. rate of growth. Leading the U.S. expansion were stepped-up deliveries of organics and manufactured fertilizers. Conversely, shipments of inorganic elements and oxides were below the previous year's level.

U.S. share data for the final two quarters of 1976 and the year 1976 have been revised.

MORAN AVOWS COMMERCE SUPPORT TO PROMOTIONS ABROAD BY U.S. STATES

Trade and investment programs conducted by state development agencies have added millions of dollars to the U.S. economy, Deputy Assistant Secretary of Commerce W. Dean Moran told a recent meeting of the National Association of State Development Agencies, as he declared: "The Department of Commerce will in the future, as it has in the past, support these efforts with all the resources at its disposal."

Moran cited a number of examples of state development agencies utilizing Commerce Department export promotion programs to increase sales abroad:

► The Maryland Department of Economic and Community Development brought six new-to-market manufacturers to the Commerce pavilion at the Paris Air Show last June. The six said they expect to do almost $5 million in business within a year as a result of the exhibition.

► The Pennsylvania Bureau of International Commerce brought five new-to-market companies to a Commerce exhibition of electronics industry equipment in Munich last fall. As a result, they forecast almost $1.7 million worth of business from the show within a year.

► With Commerce assistance, the Kansas Department of Economic Development sent an agribusiness trade mission to Africa last spring. The mission reported anticipated sales of $40 million over the next five years.

Moran noted that 26 state development agencies have received the President's "E" and "E" Star Awards for outstanding accomplishment in promoting U.S. sales overseas.

In addition, Moran said, Commerce and the National Association of State Development Agencies "have worked together amicably — and successfully — for many years" to facilitate foreign direct investment in the United States.

"Our long series of 'Invest in U.S.A.' conferences in Europe, Japan, Canada and this country has paid off handsomely in terms of new manufacturing facilities, new jobs and new revenues for local communities all across the country," he said.

MISSION SEES W. AFRICAN FISHING INDUSTRIES EAGER TO MODERNIZE

Fishing and related industries in Liberia, Ghana, and Nigeria are casting about for ways to upgrade and modernize their equipment and operations. In each of these West African countries recently, a U.S. commercial fishing trade mission heard from government officials and the business community expressions of interest in doing business with U.S. firms.

Members of the mission represented a broad cross-section of fishing expertise, their companies producing diversified equipment including commercial fishing vessels, marine engines and generators, automatic fish scaling machines, hydraulic deck machinery/fish pumps and winches, marine refrigeration and freezing equipment, seafood processing machinery, pneumatic unloading equipment and radars, gyro-compasses, lorans, depth sounders and steering controls.

Of the three countries visited, Nigeria provides the strongest sales potential, reports Mission Director Frank J. O'Connor of the Commerce Department. There, the expanding demand for fish for the coming year is expected to reach a million tons. B. F. Dada, Director of the Federal Department of Fisheries, advised the mission that his government will be spending $6 million on the national accelerated fish production program during the current fiscal year. Under this program, Nigerian fishermen are to be provided with seaworthy crafts and outboard engines as well as modern fishing nets and gear at half of the equipment cost. Dada stated also that Nigeria is interested in joint ventures with U.S. firms for facilities to produce fishing equipment in that country.

Additional meetings were held with the Agro-Allied Division of the Federal Ministry of Industries, Republic Fisheries of Nigeria Ltd., Fisheries Service Co.—Ijora Fisheries, and the Principal Fisheries Officer of the Lagos State Ministry of Agriculture and Natural Resources. There are good prospects also for boat sales for fishing and fish transport on the estuaries and lakes of the country, and one mission member is working on such proposals.

At Bushrod Island in Liberia, the mission met with Stephen Carroll, President, and other officials of Mesufish of the Mesurado Group of Companies which controls the Liberian fishing industry. These meetings provided insight into the country's fishing activities and planning and established strong relationships between the members of the group and the mission for the future. Carroll was seeking proposals on new fishing craft and one mission member plans to submit such a proposal. There are plans also for dredging and rebuilding the harbor at Monrovia.

A number of important meetings were held with fishing-oriented officials in Ghana, including the Director of the Fisheries Department. A visit to the fishing port of Tema allowed the mission to observe operations in the harbor.

The U.S. firms were told that Ghana has a pressing need to build up its fishing industry, not only to create jobs but also to provide additional protein supplies for the country's population. Officials are also going forward with plans for fish research facilities and there is a need for bigger and better fishing and shrimp trawlers.

During the visits to all three countries, the mission invited the West Africans to visit the United States and a number of such visits were promised by fishing industry officials.

Mission Director O'Connor reports that one member consummated sales of $200,000. Within the next 12 months, three members expect to appoint sales representatives, one anticipates signing a licensing agreement, and about $5.5 million in sales is expected to develop for mission members in these West African nations. In the words of James W. Smith, Sort-Rite Sales Corp., Harlingen, Tex., "The good interviews, outstanding government help, wonderful people bodes well for a great potential for the U.S. businessman."

Members of the mission, in addition to Smith, were: A. F. Hess, Bender Shipbuilding Co., Mobile, Ala.; J. W. Holterman, Caterpillar Tractor Co., Peoria, Ill.; Neil C. Brophy, General Fish Machine Co. Inc., Wakefield, Mass.; John R. Logan, Marine Construction & Design Co., Seattle, Wash.; Edward Rodak, Marine Development Corp., Richmond, Va.; R. J. Muir, Sperry Marine Systems, Great Neck, N.Y.; William P. Esau, Thompson Trawlers, Inc., Titusville, Fla.

IN WEST AFRICA—*During the recent visit by U.S. commercial fishing trade mission in Liberia, the group was given a guided tour of the Mesufish operation by company president Stephen Carroll (right). Mission Director Frank J. O'Connor of the Commerce Department is at left.*

Multilateral Trade Negotiations

This article is another in a series of progress reports on the multilateral trade negotiations, prepared by the Commerce Department Office of International Trade Policy.

The United States is continuing its intensive efforts to implement the recently accelerated timetable for the Multilateral Trade Negotiations (reported in a featured article in the Aug. 15 issue of *Commerce America*). A major part of these efforts has been a series of bilateral meetings, in Geneva and elsewhere.

The July meetings with the European Community sought to speed the pace of the negotiations, complete the necessary preparatory work and get down to actual bargaining by Jan. 15. The preparatory work itself, however, requires hard bargaining this fall if countries are to agree on a plan for reducing tariffs, complete draft texts for negotiation of various agreements, and table their initial offers to or requests of other countries in time to set the stage for the detailed negotiating sessions.

Subsequent to the July meetings, U.S. negotiators met with representatives of Canada, Switzerland, Mexico, the Nordic countries (Norway, Sweden, Finland and Iceland), Trinidad and Tobago, Argentina, Brazil, Colombia, Japan, and the Association of South East Asian Nations (ASEAN—composed of the Philippines, Malaysia, Singapore, Thailand and Indonesia). Additionally, informal contacts between the delegations in Geneva are being stepped up.

In each case, the U.S. intent was to encourage cooperation in meeting the new schedule of negotiations and better to identify areas in which greater efforts are needed if the negotiations are to be successful. These bilateral talks will continue throughout the fall and will become progressively more detailed.

FRENCH, GERMAN MARKETS RIPE FOR LATEST U.S. HEALTH CARE EQUIPMENT

France, rapidly modernizing its health system, and Germany, interested in preventive medicine and, as always, in latest medical techniques, offer expanding markets today for sophisticated health care equipment, according to U.S. firms participating recently in twinned exhibitions in Paris and Hanover.

Of the 29 exhibitors at the U.S. Trade Center show in Paris, all but two were new to the market and all but one have annual sales below $50 million. Almost the entire group moved on to the U.S. exhibition at INTERHOSPITAL 77, an international fair which followed immediately in Hanover. The "tandem" exhibitions, organized by the Commerce Department, thus provided these smaller firms immediate access to two substantial markets for the price of one round-trip ticket.

The United States currently exports about $25 million worth of biomedical equipment annually to France—a figure that is expected to increase to $36.4 million by 1980. French visitors at the U.S. show commented that they saw equipment "not yet seen here" and expressed interest in many items. Both exhibitors and visitors interviewed believed that the U.S. technological lead would continue for some time.

Among products considered to have the best sales potential are clinical and diagnostic audiometers, nuclear diagnostic systems, educational anatomical models, advanced endoscopy equipment, vacuum containers for use in sterilizing and storing medical instruments, surgical retractors apparatus, and sealing machines for packaging gauze and medical disposables.

The exhibitors project their orders in the next year at more than $2 million. Three representation agreements were concluded; 63 are expected within the next 12 months.

In Germany, where the trade exhibition trend is toward specialized vertical fairs, INTERHOSPITAL reputedly has become one of the most comprehensive and important events of its kind in the world. Now held biennially, this year's event was the fifth presentation of hospital equipment and supplies, with exhibitors from 13 countries outside Germany.

The U.S. International Marketing Center in Cologne, established earlier this year to assist U.S. firms in promoting their products overseas, staged the American exhibit—with 33 participants representing 47 firms displaying their products. Illinois also had a booth, promoting the state's products. Again, virtually all of the exhibitors were new to the market.

Almost all described their products as competitive with the German or other European equipment in design, technology, price, efficiency and versatility. Among those receiving most favorable attention were cryosurgical instruments, hospital supply and medical equipment, laboratory and biomedical apparatus, oxygen therapy items, disposable respirator circuits.

Sales during the show reached $267,855; projected for the next year, $7 million. Agremeents signed totaled 14; some 150 are expected to be concluded within 12 months.

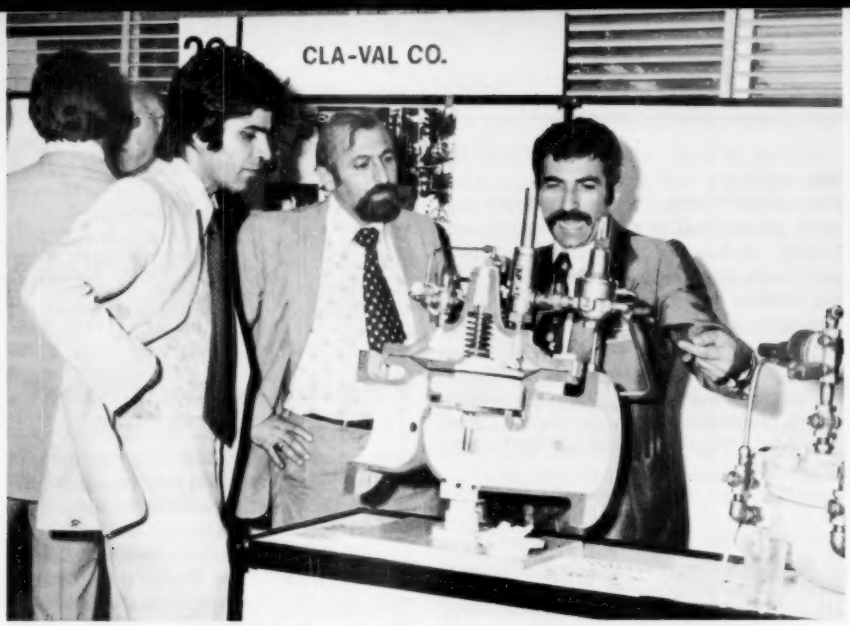
Equipment For Handicapped To Be Exhibited In Paris

U.S. firms are invited to participate in READAPT 77, an exhibition of equipment for the handicapped, to be held in Paris Dec. 14-18. Held biennially, the exhibition attracted some 85 participants and 10,000 visitors in 1975. For further information, contact: M. Jacques Sourzat, READAPT Service, 1-3 Rue Marcel Cachin, 93150 Le Blanc Mesnil, Paris, France. telephone, 929 86 50.

Plan Store Equipment Show

The first World Retailers Business and Equipment Exposition is being planned for Grosvenor House, London next April 16-18 in conjunction with the Sixth World Conference of Retailers. U.S. firms interested in displaying business equipment, services and technology related to retailing may contact National Retail Merchants Assn. Enterprises, Inc., 100 W. 31st St., New York, N.Y. 10001.

TANDEM U.S. EXHIBITIONS—*At medical equipment show in Paris, Erick Sokolower, president of Repex Inc., demonstrates disposable respirator circuit to potential customer. Photo at right shows display booth of Frigitronics of Connecticut, Inc., in the U.S. section of* Interhospital 77, *an international biennial fair in Hanover focusing on hospital equipment and supplies.*



FOR WATER RESOURCES DEVELOPMENT—*At U.S. Trade Center in Tehran, Martin Picket of Clay-Val demonstrates pressure valves to Iranian Government official.*

U.S. EQUIPMENT SELLS IN IRAN FOR DEVELOPMENT OF WATER RESOURCES

Development of water resources in Iran is high on its list of priorities and the Sixth Development Plan, to begin in March 1978, is expected to devote significant public funds to such a program.

Although the environmental movement is still nascent in Iran, the government is becoming increasingly aware of the need for certain basic requisites—for example, sewage treatment and the efficient and sound use of water—and is already implementing programs that will continue to grow and offer opportunities for U.S. manufacturers.

For a Water Resources Exhibition at the U.S. Trade Center in Tehran recently, 26 U.S. firms—23 of them new to the market—displayed their equipment. Among the products judged to have the best sales potential were specialized pumps and valves for sewage and water treatment, surface aerators, waste water treatment systems, analyzing equipment, geophysical instrumentation including seismographs, rotary water well drilling equipment, irrigation systems, desalination evaporators, concrete pipes, reverse osmosis systems, cast iron fittings and flanges, filtering equipment, and water sterilizers.

Floor sales during the show totaled $319,593; projected for the next 12 months, $6.1 million; representatives appointed, 11; under negotiation, 16.

Most of the exhibitors felt that their products were price competitive in the Iranian market. Despite some differences on initial cost for American equipment as opposed to that of third-country suppliers, durability and technology were generally seen as offsetting these differences. Some equipment presented, however, had technological components that made it unacceptable, not because of third-country competition but because the market is not yet able to "absorb" it—for example, laser control equipment for scrapers and trenchers. Thus, with the exception of instrumentation equipment, there may be little technological development in this field that will be applicable to the Iranian market over the next five years. Significant breakthroughs in irrigation techniques and equipment would be an exception.

In Iran, various government agencies are the principal end users of water resources equipment. The country's requirements in agricultural, industrial and public-use applications are expected to grow impressively over the next five years. Private sector use should also grow apace, especially in irrigation for agro-industry.

Electrotechnical, Power Transmission Equipment Attracts Soviet Buyers

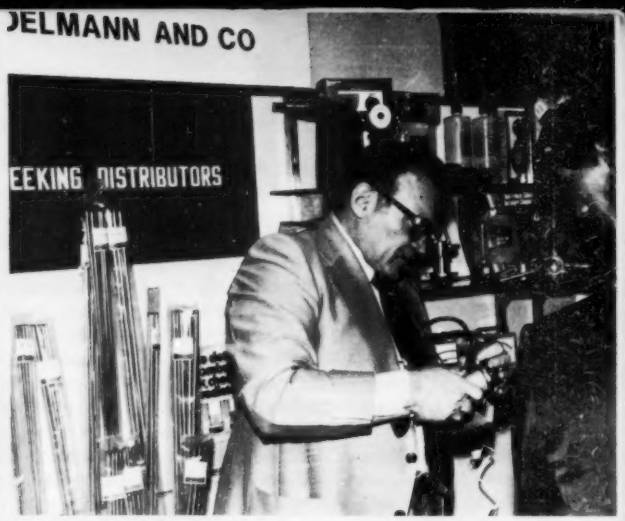
Almost $1.2 million in sales and orders were reported by U.S. firms participating recently in a major international trade show in Moscow, focusing on electrotechnical equipment and power transmission.

As part of the USSR's international exhibition program, ELECTRO 77 was organized by the Soviet Chamber of Commerce and Industry in cooperation with the Ministry of the Electrotechnical Industry and the State Committee for Science and Technology. It was only the second show of its type to be organized by the Soviet Union; the first was in 1972.

Eighteen U.S. companies and the Institute of Electrical and Electronics Engineers participated in the U.S. section of ELECTRO under sponsorship of the Commerce Department's Bureau of East-West Trade. Most of the U.S. sales and orders received were for smaller, highly automated equipment, much of it in the production or test/measurement areas. A number of the exhibitors commented on the high technical qualifications of the visitors and the excellent business contacts which resulted.

The United States was one of 23 countries mounting exhibitions at ELECTRO 77. Others included the CEMA (Council for Mutual Economic Assistance) members, Austria, Belgium, Finland, Italy, Japan, Netherlands, the Scandinavian countries, Switzerland, United Kingdom, and the Federal Republic of Germany which had the largest presence among the foreign participants. The Soviet Union itself mounted a large exhibition of electrical power equipment that is produced domestically.

AT INT'L FAIR, MOSCOW—*During Electro 77, Soviet Radio Minister P. S. Pleshakov (right) talked (through interpreter) with Brian Boorman (left), Bachi, Inc., at the Illinois company's stand. Background left, Lars Lofas, U.S. exhibition director.*



ACTIVITY AT TRADE CENTER—*At the Automotive Maintenance and Servicing Equipment exhibition at the Taipei U.S. Trade Center in April, 26 U.S. firms drew an interested audience (left) and Leslie Tokay, export manager of E. Edelmann & Co., Skokie, Ill., demonstrated products at his booth (right). Main exhibition hall has approximately 3,000 square feet of floor space.*

U.S. CENTER IN TAIPEI FILLED EXHIBITION VOID, AND 700 FIRMS CAME

Attracted to the growth markets of Taiwan, U.S. firms would seek to display their products at international trade fairs in that nation—and find such events practically non-existent. But the exhibition route opened up for them in 1974 with the establishment of a U.S. Trade Center in Taipei.

A recent survey of Trade Center activities since its opening shows that in 40 months of operation the staff has worked with more than 700 U.S. companies, two-thirds of them new to the Taiwan scene.

In 200 events the sales off the floor have now totaled upward of $12 million, and there have been follow-on sales estimates of $250 million more. Attendance has passed 100,000. Importantly, the Center is able to bring in the top decision-makers, since most industry or government managers are headquartered in Taipei.

Well over a hundred distributors and agents have been appointed at Trade Center events as a result of the agency-finding efforts of the Trade Center and the Commercial Staff of the American Embassy.

The Taipei Trade Center has introduced the U.S. state-of-the-art to Taiwan in communications equipment, computers and related equipment, machine tools and metalworking equipment, laboratory, scientific and engineering instruments, process control equipment, automotive maintenance equipment, hotel and restaurant equipment, printing and graphic arts equipment, and shipbuilding, harbor and dockside equipment.

In addition to the major exhibitions on these themes, small-scale exhibitions have been held in plastics equipment, packaging equipment and advanced business systems, and over 150 Business-Sponsored Promotions (BSP's) have been held on behalf of almost 600 U.S. firms. The BSP's are mini-events sponsored by individual firms or groups of firms.

The themes that have received the heaviest exposure are those that have special relevance to Taiwan's burgeoning trade and industry, such as metalworking, computer systems, shipbuilding and harbor equipment and instrumentation of all types.

Taiwan's growth plans

The economy of Taiwan is often characterized by U.S. businessmen as "similar to Japan 10 or 15 years ago." The GNP of Taiwan grew at a real annual rate of 12 percent last year reaching $17 billion, over $1,000 per person. The Republic of China government is attempting to maintain the high economic growth rate by following the same policies the Japanese did after World War II. Export-oriented industries are emphasized, especially those that are capital-intensive and skill-intensive. Import-substitution is also a high priority, since Taiwan is trying to avoid becoming an assembly station for Japan.

By manufacturing more intermediate products, such as plastic resins from crude oil, Taiwan intends to increase its share of value added domestically. Taiwan is now hard-pressed by competition from Korea and the Philippines in light industry, e.g. textiles, and electronics assembly. Therefore, the government is structuring investment incentives to aid the development of precision industries and heavy industry, the "industries of the future."

Taiwan's major asset is its large, diligent, well-educated and trainable labor force; to increase the productivity of its labor and improve the quality of its output, it must continue to import large amounts of advanced production machinery and technical expertise.

Sales prospects for U.S. manufacturers should continue to be especially good in view of the government's policy of encouraging purchases of U.S. equipment. The U.S. suffered a deficit of $1.2 billion in its trade with Taiwan in 1976, and Taiwan suffered a still larger deficit with Japan; so, all other factors being equal, U.S. equipment will be favored over Japanese.

The Trade Center in Taipei includes a commercial library, a business lounge and a seminar/conference room with audio-visual facilities. The main exhibition hall has approximately 3,000 square feet of floor space.

A Product Marketing Service is now offered to enable a U.S. business executive to use the Trade Center as an office away from home. Firms that have used the service have a suitable central place where for a nominal fee, they can make unlimited local calls, receive calls, meet business clients, not to mention having access to the expertise of the Trade Center staff.

If an international marketing executive is visiting a number of countries, the Center can provide him or her with a low-cost opportunity to renew and expand sales contacts. (For details on this program contact a Department of Commerce District Office.)

The major exhibitions scheduled for 1978 are Electronics Industry Production and Test Equipment in April, Construction and Building Equipment in May, Packaging Equipment in July, Fluid Power in August, Computers and Related Equipment in September, and Printing and Graphic Arts in November. Also currently in planning for 1979 are exhibitions in Industrial Process Control and Instruments; Pollution Control Equipment; Energy Systems; Communications Instrumentation and Equipment; and Plant Maintenance and Industrial Operations.

SAUDIS MOVE AHEAD WITH PROJECT PLANS; PATIENCE, PERSONAL VISIT CAN PAY

Saudi Arabian imports are expected by Joseph O. Eblan, Commercial Officer at the U.S. Embassy in Jidda, to increase at an annual rate of at least 30 percent in 1977 and in the coming three years.

This year, many items required to implement the 142 projects tendered in 1976 for the Five-Year Development Plan will be shipped and others will be purchased. Despite many warnings that the plan would be cancelled, or that significant sectors of it would be curtailed because of infrastructural problems, projects are going forward. The $16 billion Jubayl project is in full implementation, contracts have been let for construction of thousands of kilometers of new roads, multibillion dollar telecommunications projects have been tendered and bid, new city planning is proceeding, about six new ports are being built, and present port expansion plans are being implemented. It appears that every sector of the Five-Year Plan is going ahead, including social welfare projects involving medical care, housing, electrification, water desalination and distribution, and transportation.

Practically the entire requirements to implement the plan must be imported, including much of the labor. Present estimates are that Saudi Arabia will import goods valued at over $14 billion in 1977, with the U.S. providing about $4.46 billion.

Despite heavy competition from European and Asian suppliers, Saudi buyers, official and private, at present still prefer U.S. products because of technical superiority, familiarity and unique local conditions such as the prevalence of U.S.-standard electrical characteristics. Sixty-cycle current is found throughout the Kingdom. Saudi merchants have increased the number of trade opportunities presented to the U.S. Embassy's Commercial unit to about 40 per month. They turn quickly to other suppliers when delays in response and action occur.

The continued growth of affluence of the Saudi economy and the range of products and services required in all fields from heavy equipment to consumer soft goods presents excellent sales potential for U.S. exporters. Purchase orders for heavy equipment to implement the numerous projects tendered and bid in 1976 continue unabated. One U.S. firm's agent sold 1,600 heavy tractors in 1976 and more than 400 generating units. The agency is expanding and foresees a bigger sales year for 1977. Heavy attrition on roadmaking and other construction equipment due to climate, rough terrain and intense usage has resulted in a steady demand for heavy trucks, road graders, cranes, transport equipment and tractors. It is estimated that Saudi Arabia's imports of such items will represent over 40 percent of total import value in the coming year, mostly from the United States.

Along with Jubayl, the Yenbo multibillion dollar project is under way and the master plan was completed in August; expansion of the Kingdom's ports facilities and numerous road projects are proceeding of necessity faster than scheduled. In recent months the city of Jidda alone has newly surfaced or repaved some 2,000 kilometers of roads and streets, and according to its mayor there is much more to be done. In Riyadh, 18 overpasses are planned and the city is expanding in all directions. The northern section of Jidda has seen construction of more than 30,000 new residence units in the past two years, all in the private sector. The government's Jidda Housing project, organized by the Ministry of Public Works and Housing, calls for construction of twelve 18-story apartment buildings; contracts have been let to two French firms and one Swiss company.

Construction of the steel plant at Jubayl has been contracted to a German firm, Korf Industries. Also at Jubayl, a consortium of Japanese and one U.S. firm has contracted to build a methanol plant with a price tag of $300 million. Construction is to start in 1979. Officials of the Korean Hyundai Construction Co. have told the Embassy that much of the construction equipment for the $953 million industrial port project at Jubayl will be imported from the United States. Purchase of new equipment to handle port expansion at Yenbo, Jidda, Jubayl, Damman and others in the coming year is expected to peak to unprecedented levels.

To implement the above projects, the items which will be in heavy demand are tractors, fork lifts, dump trucks, conveyors, harbor equipment, marine communications equipment, earth moving equipment, graders, and fire fighting equipment. There will be heavy demand for structural steel and components, welding equipment, field electric generators, compressors, concrete and cement pumps, cement batching plants, tractor trailers, heavy tires, paints and other surface treatment materials, and all types of hand and power tools.

Early in the year a specialized water resources mission showed that this sector has the most promising and longest range potential. Water is more expensive than gasoline in Jidda. Every industrial sector dealing with water resources is of interest to the Saudis, official and private. High among the list of particular items with excellent sales prospects are metering systems, storage tanks of all sizes, water purification equipment, hotel or institutional-sized water desalination plants, filtration equipment, well drilling machinery, pressure systems, recycling systems and water testing equipment.

SHIPMENT TO SAUDI ARABIA—*One of the largest movements of heavy lift cargo ever to originate on the Great Lakes is shown being loaded at the Port of Duluth. The shipment consisted of 16 cranes, each with a lifting capacity of from 125 to 200 tons and weighing a total of 2,825 tons. Supplier was American Hoist and Derrick Co.*

Medical and health care equipment, particularly disposables, have excellent prospects in view of the planned 11,000 new hospital beds and the numerous clinics scheduled in the Five-Year Plan. Also high on the list of upcoming priorities will be hospital furnishings and other institutional equipment, patient monitoring systems and in-house communications equipment. Institutional and residential furniture still have top potential for U.S. firms. One large Jidda dealer in European furniture sells out his showroom every ten days and has hardly scratched the surface of the market.

Lastly, the market is ripe for all sorts of consumer goods, soft and durable, fads and leisure-time items. Second only to building materials, this category has been the focal point of most trade inquiries from Saudi firms. One note of caution, however. This is no longer a consumer reject market. Saudis can afford and want first-class goods.

Eblan repeats the warning that has been given time and again for the past two years. This market can't be sold by brochures or catalogs. As for letters, many Saudi firms have been flooded with all sorts of offers and the value of mail offers has been diluted by the deluge. Serious U.S. offers by the Commerce Department's Agent/Distributor Service method or response to Saudi requests under Commerce's Trade Opportunities Program appear to be promising first steps into the market. However, nothing substitutes for a personal visit. In the competitive atmosphere of the Saudi market, there is no more important ingredient for success than patience and perseverance.

For construction contractors and consultants, the most important step toward success is submission of prequalification documents such as company brochures, 251 and 254 forms such as used for submission to the U.S. Corps of Engineers, and direction of documents to the pertinent ministries handling the projects. Architectural and engineering firms may have oversaturated the current Saudi scene but U.S. construction companies are still in heavy demand as partners and joint venturers with local firms. The current rage among Saudis is the search for foreign electrical contractors and related engineering firms. Here again, however, a visit and patience are required.

As the Five-Year Plan proceeds, the sequence of specialization now tends towards a need for landscape architects, city planning firms, traffic experts, and safety engineering firms. Such firms are welcome to send material to the Embassy's Commercial Unit for local dissemination. Address material to Commercial Section, American Embassy, Jidda, Saudi Arabia, APO 09697, New York, N.Y.

THREE FACTORS CONVERGE TO REKINDLE U.S. INTEREST IN GREEK IMPORT MARKET

U.S. export sales to Greece, traditionally under $500 million per year, have been limited by the small size of this market (population about 9 million) and aggressive competition from European suppliers aided by lower duties and transport costs. Now, however, three factors converge which in the long run are likely to boost export potential and rekindle U.S. interest in the Greek market, long dismissed as secondary by firms concentrating on the Middle East or larger European markets. They are: development of Greek energy and mineral resources, impending early entry in the Common Market, and the emergence of Athens as the primary marketing center for the Middle East. In this report from the U.S. Embassy in Athens, Commercial Officer Richard L. Jackson discusses these developments and their implications for U.S. business.

Investments Planned

Greece has announced a $57 million program of investments in seven industries to begin in 1978 and be completed by 1981. The Hellenic Industrial Development Bank (ETVA), Hellenic Industrial and Mining Investment Co. (HIMIC), and National Investment Bank for Industrial Development (NIBID) will be responsible for the allocation of funds.

The following projects will be included in this program: petrochemical complex at a cost of $640 million in Nea Karvali; $60 million asbestos factory; ferrochrome plant; development of the Messolonghi Salt Pans; ammonia plant in Kavalla; creation of an electronic telecommunications equipment industry; and $2.5 million antibiotics plant for manufacture of semi-synthetic penicillin.

Energy/Mineral Resources: Faced with an annual fuel import bill of over $1 billion, the Greek Government has given high priority to development of indigenous resources. Initial production of about 25,000 barrels per day of crude oil is scheduled to begin in late 1979 near Thassos Island, the first known petroleum deposits in Greece. Exploration and drilling is also intensifying in other areas with promising geological structures. Emphasis is equally given to exploitation of Greek lignite to fuel thermal power stations throughout Greece.

In 1976, 55 percent of total electric power was generated by lignite plants, and government plans will increase the portion to 66 percent by 1990. In addition, Prime Minister Caramanlis has approved construction of Greece's first 600 MW nuclear power plant, planned eventually to provide 9 percent of the country's generated power.

Similar developments are occurring in the mining sector, with a five-year program to invest over $500 million in new plants and equipment and an increased budget for mineral research. Major new projects for completion by 1980 include magnesite, nickel and alumina.

EEC Entry: Negotiations for Greece's early entry in the Common Market, which began in July 1976, are proceeding rapidly, and the Greek Government is pressing for the earliest possible accession with a transition period of five years to permit full adjustment. While some slippage is possible, the present timetable calls for an end of negotiations in 1978 and ratification of Greece's full membership by the end of 1979.

It is still early for prediction; however, the short-run disruptions for certain U.S. exports are likely to be more than made up for by the long-term expansion of Greece's economy which is expected to result from EEC membership. While foreign investment in Greece has been sluggish for the past three years, full membership in the Common Market will add to the existing advantages of a relatively skilled and low-cost labor force and Greece's growing commercial role in Middle Eastern markets. As Greek industry prepares to meet EEC competition, attractive opportunities will also emerge for joint ventures and licensing arrangements with U.S. firms.

Commercial Ties with the Middle East: The Lebanese Civil War, reopening of the Suez Canal, and growing demand in oil-rich Arab States has in the past three years thrust Greece into a new role as a bridge between the Middle East and U.S. and European suppliers. Greece's own exports to the region have also soared. During 1970-75, Greek exports to the Middle East and North Africa increased by an average rate of 60 percent, while total Greek exports rose by 31 percent annually. During 1976, exports to the Middle East rose by 46 percent, while overall exports climbed 26 percent.

Major Greek commodities sold in the Middle East include cement, iron, steel pipes and rods, metal constructions, aluminum products, tobacco, refined petroleum, trucks, household appliances, chemicals, plastics, synthetic yarns, foodstuffs and many other materials.

Even more dramatic, however, has been the success of 20 large Greek engineering firms in capturing major construction projects in the Middle East. Greek firms are currently prime contractors for an estimated $4 billion in projects throughout the region, of which $3.2 billion is the exclusive share of Greek firms after adjustment for project costs paid to local and other subcontractors. Involvement of

this magnitude offers bright prospects for joint ventures with U.S. firms offering specialized technology needed to complete sophisticated jobs. Desalination, oil field expertise, and hospital construction are a few of many areas with promise.

Assuming political stability in the Eastern Mediterranean, U.S. technology can offer much in Greece itself and, through Greece, in the Middle East. In the tourist sector, for example, development of islands with natural beauty and potential has been restricted by shortages of power, potable water, and fast transport. U.S. desalination techniques, solar energy developments, and high-speed jetfoil/airboats could together solve obvious problems posed by projected growth in tourist arrivals from four to six million by 1980.

In the near term, strong export opportunities exist for communications equipment and systems, mining equipment, food processing and packaging machinery, agricultural equipment, pollution control systems, and aviation and avionics equipment.

Getting the business

To exploit these and other export opportunities, new-to-market firms should be aware of traditional attitudes and practices still prevailing on the part of many Greek business executives. Some 80 percent of U.S. export sales to Greece are conducted through local commercial agents, and direct selling is difficult, particularly in the case of government procurement, which in 1977 is scheduled to total $306 million.

Effective local agents are particularly useful in obtaining advance information on forthcoming tenders which frequently have short deadlines and, at an even earlier stage, in making a significant input into tender specifications to increase the competitiveness of U.S. products. In selecting local agents for Greece, American firms should insist on personal contact rather than correspondence, which is particularly important to prospective Greek agents in establishing an effective business relationship. To be avoided by most new-to-market firms are over-extended agents who already represent 20 or more foreign firms and lack incentive or staff to aggressively promote new products. Attention should be given to an agent's ability to cover the entire Greek market, since Athenians sometimes overlook sales potential outside the capital, particularly in Greece's second city, Thessaloniki (population about 800,000), and Northern Greece generally, which is the most rapidly developing region.

Careful evaluation of these opportunities and selection of quality agents should permit the United States to maintain and expand its market share (an average 8.5 percent over ten years), despite strong European competition once Greece becomes a full EEC member.

SIGNS IN SWITZERLAND POINT TO SLOW UPTURN; SUPPLIERS GIVEN ADVICE

Exports have been leading Switzerland on the slow road to recovery from the worst recession the country has known in postwar years. While senior government executives have so far been careful not to appear too optimistic, officials at the U.S. Embassy in Bern note signs that the economy and the business climate have definitely improved, if only modestly. Swiss sales abroad are up substantially so far this year, the number of unemployed has fallen appreciably, and inflation has been running at an annual rate of only 1.0 percent. Industrial investment increased by 3.0 percent in the first months of 1977. Despite a lack of substantial gain in real take-home pay, and a drop in the overall number of consumers, retail sales rose and were partly responsible for stimulating foreign sales in Switzerland.

There are several factors which influence and favor the sale of U.S. products on the Swiss market. For example, there has been a noticeable shift over the past 15 years in the emphasis on categories of imports. Thus, consumer goods rose from 28 percent of total imports in 1960 to 36 percent in 1976, while capital goods increased from 15 to 20 percent. Imports of raw materials and semi-finished products fell to under 45 percent in 1976 from 50 percent in 1960, primarily because of recession in Swiss industry. American suppliers enjoy distinct advantages and have excellent sales opportunities in the capital and consumer goods branches by virtue of the often superior quality, sophistication, and advanced technology of their machines and equipment, as well as the novelty appeal and design of their consumer goods.

Prospects in Switzerland for the sale of the following American products remain high or are improving:

Capital Goods: water pollution control equipment, such as highly sophisticated analytical instruments and advanced industrial data processing equipment for waste-water and sewage treatment plants; computers and peripheral equipment, in particular data transmission systems, mini and microcomputer systems and components, terminals, and microcomputer and memory advanced componentry with application in industrial controls, test instruments, telecommunications equipment and electronic watches; business equipment and systems, including microfilm equipment, advanced copiers, paperwork handling systems, electronic banking machines, calculators, word processing equipment, electronic accounting machines; process control instrumentation, especially for the chemical, pharmaceutical, plastics, paper, engineering, and food processing industries; and health care equipment and materials, such as analgesia and anesthesia equipment, operating room equipment, apparatus, and supplies, x-ray apparatus, tubes and supplies, nuclear radiation apparatus and instruments, patient aid supplies and equipment, disposable instruments, disposable bed linen and gowns, and medical laboratory diagnostic and scientific instruments and supplies. There is high interest in any developments which occur in solar energy equipment and technology.

Consumer Goods: do-it-yourself items—especially home building and repair materials—and hardware items; all kinds of gardening implements and tools; garden furniture; swimming pool equipment and accessories; outdoor sporting goods and camping equipment; toys and games for children as well as adults; playground equipment; model kits for airplanes, boats, ships, railroads and cars; sail boats, inflatable rafts, and boating accessories; sports footwear; leisure wear for men and women; safari and jean's look items; genuine western-style clothing; men's suits, jackets, and shirts; infant's wear and children's jeans and sweatshirts; bathroom furnishings, carpets and mats, shower curtains, bath sheets and towels, beachwear and bathrobes; costume jewelry; perfumes, cosmetics, and toiletries; musical instruments; frozen prepared foods; skillet meals; frozen and fresh fish.

Detailed information on the market in Switzerland for many of the products listed in the above two categories is available from the Department of Commerce.

American suppliers eager to enter the Swiss market should carefully consider the following points. Swiss business people are conservative by nature. They enjoy meeting senior representatives of both small and large companies, but almost invariably prefer to meet by prior appointment. The Swiss appreciate prompt and courteous response to their correspondence. Swiss buyers are demanding, and are accustomed to having their requirements carefully adhered to. A manufacturer with a "take it or leave it" attitude will not get very far. Other considerations are delivery of merchandise on time and according to specifications, investigation and correction of justified trade complaints, efficient after-sales service, and dependability and continuity of supply.

The successful American supplier will pay particular attention to the following additional points:

- Although English is widely understood in Switzerland, sales literature and operation and maintenance manuals should be printed in German and possibly French. Sales literature should be informative and attractively designed, complete with accurate, terse, yet comprehensive details.
- Bids for large machinery or projects should be accompanied by clear technical drawings and imaginative suggestions for solving a customer's problems.
- Prices should be quoted at least f.o.b.

a major American Atlantic port, if a c.i.f. quote is not possible. Avoid quoting ex-factory prices, and bear in mind that it is difficult for Swiss buyers to obtain reliable information on U.S. domestic freight rates. A complete price quotation, including freight, insurance, and packing, is an indication of an American supplier's alertness and competence and of his willingness to service foreign traders.

- Swiss importers and distributors have often stated that export prices quoted by U.S. firms are in fact wholesale prices valid for the U.S. market. They feel that American wholesale prices include costs for advertising, and for marketing the product in the United States, and believe that these marketing costs should not be added to the landed cost of imported goods in an overseas country. U.S. suppliers should, therefore, bear this aspect in mind when they compute their prices and quote to Swiss companies.
- Payment terms of U.S. suppliers should be competitive with those of European and Japanese manufacturers who sell on open account. A U.S. supplier who deals with an unknown Swiss customer for the first time and who insists on payment guarantees may ship collect. The documents are presented through a bank or against a sight-draft after checking the bona fides of his customer through appropriate credit reporting agencies or by means of a Commerce Department WTDR. Only in cases where credit reports indicate that a customer represents a credit risk should an American supplier demand payment by letter of credit.

New Bolivian Code Treats Agency Contracts

A new Bolivian Commercial Code includes provisions regulating commercial agency contracts.

Among the provisions are that the contract must be recorded in the *Commercial Register* and shall include the scope of the agent's authority, field of activity, basis for remuneration, territorial limitations and contract duration. All contracts in force on Bolivian territory are governed by Bolivian law.

Termination of agency contracts can be based on: breach of contract obligations by agent or principal, an act or omission by either party adversely affecting the interest of the other, loss of business contrary to contract stipulations through fault of the agent, bankruptcy, incapacity or disability of either agent or principal, and contract expiration.

Copies of an unofficial translation of the Law of March 29 implementing the new code are available from the Foreign Business Practices Division, Office of International Finance and Investment, Bureau of International Economic Policy and Research, U.S. Department of Commerce, Washington, D.C. 20230, 202-377-2828.

ECONOMIC EVENTS FAVOR INDONESIAN DEVELOPMENT; U.S. POSITION IS STRONG

The Indonesian Government seems determined to make the most of a convergence of events which bode well for Indonesia, its trading partners and those aggressive foreign firms willing to spend the required time and effort to penetrate this $7.6 billion import market, according to David P. Rehfuss, Commercial Officer at the U.S. Embassy in Jakarta.

Last year was Indonesia's biggest trading year ever. Total exports (with oil on a net basis), which were up 30 percent from IFY 1975/76 (Indonesian FY, April 1-March 31), totaled $6.2 billion (59 percent oil and remainder mainly unprocessed timber, rubber, tin, coffee and palm oil). Imports of goods and services were up 38 percent to $7.6 billion. Although this rate of increase cannot be sustained, both exports and imports are projected to expand substantially in 1977.

The overall balance of payments picture is good. Indonesia improved significantly from 1975's negative balance to a positive $1 billion in IFY 1976/77. The IFY 1977/78 balance of payments is projected by the World Bank to have an overall surplus of $600 million. Foreign exchange reserves have reached more than $2 billion, an historic high point. Inflation, currently running at an annual rate of 12 percent, is down from previous years.

Also, there will be significant official aid inflows in IFY 1977/78. Approximately $1.3 billion was pledged recently by the World Bank, the Asian Development Bank (ADB) and 14 Western country members of the Inter-Governmental Group on Indonesia. Of this amount, the United States will provide $148 million in bilateral assistance, and $700 million will come from untied World Bank and ADB sources. Approximately $250 million will come from Middle East and Eastern European sources. The Indonesian Government is also expected to borrow some $600 million in supplier credits.

World Bank and ADB projects which may go to tender within the next 12 months include road improvement (one loan), water supply and irrigation (six), electrical power generation (three), and sugar industry rehabilitation (two). More information on these projects is available from the Economic/Commercial Section of the American Embassy in Jakarta.

On the other hand, overall foreign investment into Indonesia, which has a direct relationship to sales opportunities, is down. In 1976, American investments worth only $20.7 million were approved. Also down is Indonesian Government spending, because of required foreign debt servicing resulting from the 1975 crisis with the state oil company. To help close the resource gap, the Indonesian Government is in the process of clearing a plan to simplify procedures to spur new investment.

In the absence of significant levels of new investment, foreign government trade departments are turning to traditional trade promotion techniques to increase their sales in Indonesia. The French Government sponsored a highly successful trade fair in March which exhibited an extensive range of French-manufactured items. Sales were very good. Exhibition space purchases by firms in the annual month-long government-sponsored Jakarta Trade Fair (June-July) were at an all-time high. The U.S. Department of Com-

PROMOTING BUSINESS WITH INDONESIA—*Frank A. Weil, Asst. Secretary of Commerce for Domestic and International Business, presents copy of a new Commerce study on business opportunities in Indonesia to Indonesian Ambassador Roesmin Nurjadin. Deputy Asst. Secretary for International Commerce Dean Moran looks on at right. See accompanying story for information on ordering this publication.*

merce and the Embassy in Jakarta will sponsor a trade fair Oct. 31-Nov. 5. To be called DINAMIKA/AGRIQUIP '77, it will feature agricultural, forest production and logging equipment.

Total sales of agricultural and related equipment in 1976 were estimated at more than $10 million. New programs and continued expansion are expected to result in an annual average increase of over 14 percent. The market for agricultural equipment is expected to exceed $17 million by 1980. Indonesia possesses the richest forest resources in East Asia. In 1975 the total Indonesian market for timber harvesting, handling, processing and production equipment amounted to $14 million, with Japanese suppliers enjoying the largest share. The size of the capital goods market for pulp and paper mills and machinery was $5 million, with Japan and West German firms dominating the market. The best opportunities for American equipment are in the areas of logging machinery, strongly built portable sawmills, chain saws, lathes, sanders and dry kilns.

Other U.S. commodity groups which appear to have good sales potential include construction, mining, and materials handling equipment of all kinds, textile machinery and business equipment. Electrical power generation equipment also offers significant export opportunities for U.S. suppliers. With mounting population pressures and growing energy requirements, the expansion of electrical power is receiving priority. American, Japanese, and West German firms are the leading suppliers. The French and Japanese are expected to increase their market share because of highly competitive financing arrangements (French and Japanese) and increased investment in hydroelectric projects (Japanese). Market opportunities are the best in diesel generator sets, gas turbines and turnkey hydroelectric plants —all of which will require the successful supplier to arrange competitive financing.

Allied with power generation equipment are increasing requirements for engineering and mechanical power. Indonesia's Second Five-Year Plan (1974-79) calls for the development of rural electrification through the medium of mini-hydro and diesel power plants. In addition, the extensive plans of the state electric company for additional power generation will require transmission and distribution equipment to facilitate the sale of power to consumers throughout the country. A wide range of transformers, switchgear and other such equipment will be required. As in the electrical power generation sector, engineering and mechanical power equipment suppliers from Japan (25 percent), United States (21 percent), and West Germany (16 percent) dominate. The Japanese have been successful in winning international tenders as a result of low prices and liberal financing. Sales of U.S. and West German equipment have been facilitated through supplier credits and government bilateral loans. U.K. and French generating equipment suppliers sometimes offer their equipment in a package with distribution and transmission equipment included. As a result, many U.K. and French transmission equipment manufacturers have been able to "tag along" with generator suppliers in sales of their equipment.

In 1976, when U.S. firms captured 17 percent of the Indonesian market, American sales surpassed $1 billion for the first time. Factors behind this strong position included bilateral assistance programs, competitiveness of U.S. products and continuing major projects procurement. The main lines were electrical and non-electrical machinery ($436.4 million), transportation equipment, mostly aircraft ($182.7 million), rice and wheat ($166 million), other manufactured products ($100.6 million), chemicals ($55.7 million) and raw cotton ($49.1 million).

Those firms already in the Indonesian market know that they must work very closely with their agents, keep in touch with at least one of the four American bank branches or eight American banks with representative offices, maintain contact with the U.S. Department of Commerce, and visit the Embassy's Economic/Commercial section in order to keep abreast of developments in Indonesia. Those firms not yet introduced to this market, but becoming aware of the opportunities which it offers, should visit their nearest Department of Commerce District Office to review prospects.

If seriously interested, they should be prepared to visit the country for a firsthand look. Such visits should not be perfunctory—communications are bad, government officials harried and information often difficult to obtain. Serious visitors must allow for these factors for a successful visit. A key factor is the need for such visitors to speak authoritatively not only about their products but also about financing, which is an increasingly important element in Indonesian sales. Such visitors should also be equipped to talk about after-sale service, possible training and technical help built into the sales package. European, Australian and Japanese competitors often succeed on the basis of these factors and Americans fail because they are not equipped to speak authoritatively on them. The Embassy is ready to assist with detailed briefings and leads.

The Department of Commerce has just published a valuable guide for American firms. *Indonesia: A Survey of U.S. Business Opportunities* is a market research-based study of major Indonesian economic sectors to identify business opportunities for U.S. firms. The 14 individual industry reports describe structure and dynamics; identify key government and business organizations; discuss major development objectives, trends, programs and projects; point out principal requirements for capital goods, technology, and services; evaluate the competitive environment in which U.S. firms must operate; and outline important marketing considerations. A check or money order for $4.75 per copy, payable to the Superintendent of Documents, should be sent to: U.S. Department of Commerce, FCAT Br., Room 6880, Washington, D.C. 20230.

Another recent Commerce Department publication offers names and addresses of more than 1,200 prospective Indonesian agents, distributors and end-users of American products. Copies of the 287-page *Trade List: Business Firms/Indonesia* are available at $3 each from the U.S. Department of Commerce, DIB/EID-1033/TL, Washington, D.C. 20230, or through most Commerce District Offices.

Singapore's Entrepot Function Makes It A Large Importer; Economy Is Back On Target

Singapore's economic growth rate in 1976 was right in the middle of the 6-8 percent range that the government is aiming at for the balance of this decade. This represented a substantial increase over the 4 percent expansion recorded in 1975, and the trend in 1977 has been consolidation of that improved performance, reports Charles S. Ahlgren, former Commercial Officer at the U.S. Embassy in Singapore. The buoyancy of external trade has been sustained, although commodities and consumer goods have fared much better than trade in manufactured products and capital goods. Singapore's manufacturing sector seems to be retreating somewhat from the 10 percent growth level recorded in 1976.

Prime Minister Lee's People's Action Party won all 69 seats in parliament in December's election, thus extending its mandate for another five years. The resultant ongoing political stability is expected to be complemented by continued economic stability. While no one projects dramatic improvement or a return to the good old days of double-digit growth, neither is any significant downturn likely, although Singapore's officials are concerned about growing world trade protectionism and a continued low level of investment. The business community is optimistic, if not enthusiastic, about the economic prospects ahead.

The hoped-for rise in new investment commitments, which bottomed out in 1975, has as yet failed to materialize. Singapore's investment climate remains attractive, and the government has intensified efforts to encourage both foreign and local investors. In addition to the traditional policy of granting investment incentives to high-technology, capital-intensive investors, the government is looking with a

more favorable eye at labor-intensive industries. Value added is another major criterion in evaluating which industries to encourage.

While all types and sizes of U.S. investment are welcome, the government has picked out five high-technology product areas for intensive investment promotion: aviation and avionics; communications equipment; specialty chemicals; medical instruments; consumer and industrial electronics products.

Several major projects in Singapore could provide significant "big ticket" opportunities to U.S. exporters. Most promising is the new Singapore International Airport, begun in 1976, which will require lighting and ground radar systems, food preparation equipment, baggage handling and other electrical/mechanical equipment. A recently approved $800 million petrochemical project, although largely a Japanese venture, should nevertheless provide some opportunities to U.S. suppliers of process and pollution control equipment.

Ahlgren feels that the following particular markets offer good opportunities for U.S. exporters:

Building and construction supplies and equipment: This is Singapore's single largest category of imports. The potential for U.S. products is somewhat curtailed, however, by their relatively high price. Products with fair potential include: ceramic tiles, gypsum products, builders' hardware, airconditioning equipment, and heavy construction equipment. Singapore also is a valuable conduit for the reexport of building products and technology to neighboring countries.

Pumps, valves, and compressors: This important category of support equipment has been recording high growth in recent years. U.S. products such as water pumps, gate and globe valves, and portable and stationary air compressors are highly competitive. With offshore petroleum exploration in the region reviving, this market should remain buoyant.

Communications equipment and systems: One single buyer, the Telecommunication Authority of Singapore (TAS), accounts for more than 90 percent of all purchases of communications equipment. The TAS five-year development program calls for expenditures of US$440 million by 1981. The largest single category of TAS purchases will be underground telephone cables. Other salable equipment for U.S. manufacturers are central office exchanges, transmission equipment, and teleprinters. Several large regional underwater cable projects are also on the drawing boards.

Food processing and packaging equipment: Food processing is Singapore's fourth largest industry. Good sales potential exists for U.S. bottling, filling, labelling, wrapping, capping, sealing, and shrink packaging equipment.

Metalworking and finishing equipment: Most salable U.S. products include: arc welders, hydraulic and pneumatic presses, portable pneumatic handheld tools, jig grinding and boring machines, metal cleaning and spraying equipment, twist drills and drill bits, and industrial smelting and refining furnaces. There is also a market for accessories and parts for the above-listed items. Foundry machines and parts should also be in demand as existing foundries, many of which are small backyard enterprises, are upgraded and go from jobbing into production work.

Printing and graphic arts equipment: Good sales potential exists for electronic phototypesetting and composing machines, color reproduction equipment, and offset presses.

Other areas of opportunity for U.S. firms include: mining and materials handling equipment, energy systems, electronic industry production and test equipment, process control and laboratory instrumentation, business equipment and computers, agricultural products and consumer goods.

Exhibitions sponsored by the U.S. Department of Commerce on many of the above themes are held at the U.S. Regional Trade Center in Singapore and elsewhere in Southeast Asia. Details can be obtained from Thomas Moore, Director, U.S. Regional Trade Center, Ground Floor, Malayan Credit House, 96 Somerset Rd., Singapore 9.

U.S. firms may also wish to participate in one of the following important privately-sponsored exhibitions in Singapore: Machine Asia (November 1977); Offshore Petroleum Exhibition (February 1978); and ChemAsia (January 1979). More information is available from either the U.S. Embassy or the organizers (6E Mount Sophia Rd., Singapore 9).

Although sales opportunities for U.S. exporters exist across the board, some areas are much less promising than others. U.S. business executives are urged, therefore, to do their homework before investing time and money in a trip to Singapore. Any U.S. Department of Commerce District Office will be happy to assist, or contact David Earle or Lee Barnes, Office of International Marketing, U.S. Department of Commerce, Washington, D.C. 20230.

In addition, the following Overseas Business Reports provide excellent information and advice: *Marketing in Singapore* (OBR 75-8), and *Regional Markets in Southeast Asia* (OBR 75-42). These reports (50 cents a copy) and a large number of Market Research Studies ($10 a copy) are available from the Department of Commerce's National Technical Information Service, Springfield, Va. 22151.

The U.S. Embassy in Singapore also provides a wide range of services to the business community and can elaborate on this report.

Calendar For World Traders

Sept. 27—Greensboro, N.C.—Triad World Trade Assn. meeting, Holiday Inn-Airport. Information: 919-292-8252.

Sept. 27-29—Vestal, Kingston, & New Rochelle, N.Y.—Seminars on Marketing in Latin America and Africa, sponsored by New York District Office and local organizations. Information: 212-264-0620.

Sept. 28—Miami—National Economic Development Assn. Export Seminar for Small Businesses, Sheraton Four Ambassador. Information: 202-296-7000.

Sept. 28—San Diego—U.S.-Japan Symposium, Sheraton Airport. Sponsors: Consul General of Japan in Los Angeles, San Diego Chamber of Commerce, World Trade Assn. Information: 714-293-5395.

Sept. 28-Nov. 30—New York—Series of international seminars presented by International Executives Assn. (212-432-1860).

Sept. 29—Chicago—Taking the Mystery out of Selling to Japan Workshop, Japan Trade Center. Sponsors: JETRO and Commerce District Office. Commerce speaker: Arthur Miyakawa. Information: 312-353-4450.

Oct. 2-4—The Woodlands, Texas—International conference: Alternatives to Growth '77. Sponsors: The Club of Rome, Univ. of Houston, Mitchell Energy & Development Corp.

Oct. 3—Knoxville—East Tennessee International Commerce Club meeting, International Trade Mart.

Oct. 3-4—New York—Practising Law Institute's 8th Annual Institute on International Taxation, Barbizon Plaza. Information: 212-765-5700.

Oct. 4—New York—FCIB Round Table Conference, Summit Hotel.

Oct. 4-6—New York—Seminars on changes in Schedule B. Information: New York District Office, 212-264-0620.

Oct. 6 — Milwaukee — Pricing Problems Abroad seminar, Ramada Sands. Sponsors: World Trade Assn., District Office.

Oct. 6—Kansas City—District Office seminar: Trade With Eastern Europe and USSR. Robert Dollison and Dan Stein of Bureau of East-West Trade will attend.

Oct. 6 — Memphis — Mid-South Exporters' Roundtable, Monte's Restaurant.

Oct. 6-7—New York—AMA briefing on Nigeria.

Oct. 6-7—Chicago—Principles & Techniques of Exporting seminar, McCormick Inn. Sponsors: International Trade Club, Commerce District Office. 312-341-9021.

Worldwide Business Opportunities

International trade specialists in the Department of Commerce and Foreign Service Officers in the U.S. Embassies and Consulates around the world are continually developing specific commercial opportunities through which American companies can find buyers, agents, partners or investors abroad. One of the major means for communicating these opportunities promptly and accurately to the U.S. business community is through the columns of this magazine.

The section that follows presents details about upcoming trade exhibits and trade missions, licensing and joint venture proposals, opportunities to sell to foreign enterprises, visiting buyers, and details on major construction and expansion projects.

Licensing, Investment Abroad

ISRAEL—Seeks licensing arrangements for manufacture of following: **optical aids and equipment, including plastic lenses and contact lenses; metal cutting and grinding equipment, including equipment for dental application using diamond powder; small transformers for electric household appliances; large plastic products, e.g., furniture and industrial containers, by foam injection molding; disposable medical products of polymer material, e.g., injections, thermometers; metal cords for automobile and tractor radial tires.** Firm is also interested in obtaining technical know-how and equipment. Company is one of largest Kibbutz associations, incorporating 100 Kibbutzim (collective settlements), 82 of which have manufacturing facilities. Manufactured products include processed food, metalworking tools, textiles, electronic equipment, plastic products.

Organization is main financial instrument for mutual aid among the settlements; its capital fund, about $1 million. It also acts as purchasing agent of the settlements. Total output of these enterprises is $350 million. A representative will be visiting U.S. during October. Firms interested in meeting representative to discuss possible collaboration should contact ASAP: Ms. J. A. Fogg, Overseas Products & Investment Opportunities Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. Telephone: 202-377-3786. P-77532. OPIC.

JAPAN—Recently established firm seeks contacts with U.S. manufacturers of **products especially designed for left-handed people.** Has 65 employees, is general trading company. Chikara Kubo, Pres., Sanwa Shoji Co., Ltd., 1631 Aza-Yokomic, Oaza-Shimosuzurigawa, Hotaku-gun, Kumamoto Pref. 861-55. P-77533.

PHILIPPINES—U.S. firms desired to supply **plants, equipment, facilities for development of Leyte Sab-a Basin.** Project involves reclamation of swamps and wasteland, draining of water-logged areas to minimize scourge of certain endemic diseases and agricultural development. Used or obsolete equipment and facilities would be considered. Emmanuel O. Almonte, Commission on Small and Medium Industries, Industry and Investments Bldg., 385 Buendia Ave. Extension, Makati, Metro Manila 3117. P-77534. OPIC.

1499—GUINEA—Government of Guinea wishes to establish contact with U.S. firms interested in investing in **diamond mining** in Guinea. For more information contact, Economic/Commercial Section, 2nd Blvd. and 9th Ave., Boite Postale 603, Conakry. P-77549. OPIC.

1542, 8911, 5311—SAUDI ARABIA—Firm plans to establish four **department stores** in major cities. Contact sought with U.S. firms interested in building stores on turnkey basis and management for short period. Project will be financed completely by Saudi company. Terms, conditions and other details negotiable. Literature and details of previous experience in this field needed. Zuhair Sultani, Wafra United P. O. Box 756, Riyadh; telephone, 33777; cable, WAFRAH, Riyadh; telex, 20076 ICH, att'n Wafra United. P-77514. OPIC.

2076—ZAMBIA—Private company seeks finance, technology, machinery to establish **peanut oil** plant. Firm was established in 1972, exports foodstuffs to neighboring countries. C. N. Banda, Dir., Mnduwila Int'l, Inc., P.O. Box 648, Chipata. P-77515. OPIC.

2647—SAUDI ARABIA—Seeks joint venture to produce **toilet and facial tissue, sanitary napkins, diapers.** Has land available in north Jidda. Estimates investment of $200,000. U.S. participant would contribute 20% equity, technical and managerial know-how. Firm has not made market study, but believes demand is expanding for these products. Hashim Ali Madany, Partner, Int'l Trading Establishment, P. O. Box 5778, Jidda; telex, 40083 SJ; cable, SHIPHASHIM; phone, 51081, 50015. P-77516. OPIC.

2844—GERMANY—Seeks licenses from small to medium sized U.S. firms to manufacture **cosmetic products such as hair preparations, toilet soaps, perfumes, lotions and creams.** Firm employs 14, is newly established subsidiary of Swiss company. D. Ropte, Thomas & Ropte Cosmetic GmbH, Postfach 2847, An der Elisabethkirche 42, 4150 Krefeld. P-77517.

3241—THAILAND—Royal Thai Government's Ministry of Industry has granted license to Thai Lanna Cement to build **cement plant** in Lampang (Northern Thailand) with daily production capacity of 2,000 to 2,500 m.t. of portland cement for supply to consumers in that region. Firm plans to invest $100 million, 70% of which will be spent on plant machinery with remainder to be used as operating capital. Foreign loans being sought. Suwaj Meepfrom, Thai Lanna Cement Co., Amphur Muang, Lampang. P-77518. OPIC.

3300—JAPAN—Seeks license to produce **heat, friction and corrosion resistant machinery parts and attachments.** Firm presently makes industrial pumps for paper industry; brake shoes and gray iron castings for railroad cars; sprockets for harvesting machinery; cutters for haying machinery; rollers for manufacturing twisted iron bar shapes. Wants American technical know-how to improve its production of these items. Company has an alloy and casting plant in Sapporo. Equipment includes high frequency induction and electric arc furnace. Monthly production capacity is 80 tons. Firm's president plans to be in U.S. around Nov. 10 and is prepared to discuss proposal with interested U.S. firms. Akira Okuda, Pres., Sapporo Kokyo Imono K.K., Tekko Danchi, 1020, Hassamu, Nishi-ku, Sapporo, 063. P-77548.

3431, 3585—FRANCE—Small manufacturer seeks licensing arrangement to produce **equipment for camping trailers such as water closets and air conditioning.** Firm, established 1919, manufactures camping trailers; employs 140. Pierre Vannier, Les Productions Vano, 6 Rue de Babylone 59100 Roubaix; telephone, 75-56-50. P-77519.

3442, 2519—FRANCE—Small manufacturer of venetian blinds, curtain rods and accordian doors seeks licensing arrangement to produce **metal ceilings, curtain rods, steel or aluminum doors, blinds, etc.** Employs 150. Henri Fouasse, Ets. Fouasse, 120 ave. Ledru Rollin, 75011 Paris; telephone, 805-2580; telex, 211590. P-77520.

3443 — SWEDEN — Division of leading Swedish industrial enterprise seeks licensing and/or joint venture arrangement for production and marketing of **industrial**

Licensing and investment proposals from foreign firms are listed in these columns. Specific product interests in each proposal are highlighted in bold type to facilitate identification and each proposal is preceded by the appropriate four-digit product number taken from the Standard Industrial Classification (SIC) Manual.

Background information on opportunities abroad and assistance on overseas investments are available from the Overseas Products and Investment Opportunities Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. "P" numbers should be used when responding to any of the specific proposals listed.

WTDR indicates that a World Traders Data Report containing financial and background information on the foreign firm is available for $15 from the Export Information Division, Room 1033, U.S. Department of Commerce, Washington, D.C. 20230. WTDR request forms may be obtained from any Commerce District Office.

OPIC indicates that the country involved is eligible for investment insurance coverage and financing from the Overseas Private Investment Corporation. Information regarding applicable coverage may be obtained from OPIC, Washington, D.C. 20527.

heat exchangers. Representatives of firm will visit U.S. Oct. 10—Oct. 21. For further information, contact Overseas Products & Investment Opportunities Staff, Room 4021, U.S. Department of Commerce, Washington, D.C. 20230. P-77521.

3537—FRANCE—Manufacturer of material handling equipment and conveying systems seeks licensing rights to manufacture trucks operated by **magnetic system on floor level for assembly lines.** Employs 230; reports annual sales of $80 million. Duclos, Ets. J. Berthelat et Fils, 13 Rue Saint Ambroise 75011, Paris, France. Telephone, 933-0660; telex, 692 122F. P-77522.

3541, 3544—INDIA—Seeks technology to manufacture: 100 units annually of **plastic extruders with downstream or take-off equipment;** 11 units annually of **honing machines, vertical and horizontal types,** of capacity 150 mm. to 500 mm. bore diameter x 150 mm. to 2,000 mm. bore length. Established 1953, firm employs 20,000; has yearly sales of $115 million. K. V. Ramachandran, Gen. Projects Mgr. (Internal Projects), Hindustan Machine Tools Ltd. (HMT), 36 Cunningham Road, Bangalore 560052. P-77523. WTDR. OPIC.

3551—AUSTRIA—Seeks know-how produce **seed potato processing system, including loading/unloading, weighing, washing, sorting and warehousing facilities.** Firm will also consider representation and assembly as preliminary step to licensing agreement. Firm is large manufacturer of agricultural silo and warehousing systems, metalworking machines, clutches. Employs over 1,000; sales, $25 million. Interested U.S. manufacturers should write or cable Dr. Guenther E. Langer, Mktng. Mgr., Maschinenfabrik Heid A.G., Mahlerstr. 6, A-1015 Vienna. Firms responding are requested to send copy of their initial correspondence to American Embassy, 1X Boltzmanngasse 16, A-1091, Vienna, Austria. P-77537.

3551, 3589 — FRANCE — Manufacturer of **food processing machinery and restaurant equipment** seeks licenses to manufacture complementary products. Employs 120 persons. Jean Guiblet, 34 Rue de Montreuil, 78000 Versailles; telephone, 950-2649 or 950-7048. P-77524.

3559 — BOLIVIA — Seeks franchise and joint venture agreement to supply **machinery to produce plastic dolls.** Jorge Saravia, Kolob Enterprises S.R.L., Casilla 1633, La Paz. Cable: KOLOB. P-77525.

3567—FRANCE—Manufacturer of domestic and industrial heating equipment is interested in manufacturing and distributing in France any complementary products such as **heaters, filtration equipment, ventilation equipment, anti-pollution equipment.** Jean Guiblet, 34 Rue de Montreuil, 78000 Versailles; telephone, 950-2649. P-77526.

3600, 3700—VENEZUELA—Manager of Educational Aids and Training Equipment Division seeks to contact U.S. manufacturers interested in being represented in Venezuela. Firm currently represents large number of European firms specializing in educational training aids and equipment. Company is interested in following: **electronic trainers and simulators; electronic teaching machines and teaching aids; aviation industry training equipment; training aids and equipment for electric circuitry, air conditioning and refrigeration systems, gasoline and diesel engines, computer systems, telephone systems, TV and related systems, metal working (including numerical systems), hydraulic systems, thermodynamics principles; laboratory training equipment, educational aids, for areas of chemistry, biology, mechanics, etc. and training systems and equipment for aircraft control centers.** Concern intends to participate in upcoming government tenders for purchase of training equipment and their preference is to do so with U.S. representatives. Freddy Figuera, Mgr., Ferrum, C.A., Edificio Ferrum, Avenida Principal de Los Ruices, Caracas. (P.O. Box Aptdo. Del Este 70624); telex, 25238 Caracas; telephones, 35.26.11 / 35.27.00. WTDR. P-77535. OPIC.

3613, 3679—UNITED KINGDOM—Seeks licenses to manufacture and distribute **electrical/electronic accessories** for consumer appliances. Product interests include solid state switches, ozone generators, motorized accessories and timed switching devices for heating, cooking and lighting. Would market in U.K., Europe, Middle and Far East. Company makes light dimmer controls, plug in timers, security and touch switches. Employs 100. D. J. Venning, Mng. Dir., Superswitch Electric Appliances Ltd., 7 Station Trading Estate, Blackwater, Nr: Camberley, Surrey 6U17 9AH. P-77527.

3631, 3634—SWITZERLAND—A leading firm seeks licenses to manufacture **major electric home appliances and icemaking machinery,** and **small electric housewares.** In first category, concern's product interests include electric ranges, household refrigerators, microwave ovens and apparatus for defrosting foods. In small appliances, it wants to make automatic toasters, grills, plate warmers, humidifiers, mixers, coffee makers, small water heaters, hair dryers and related products. Company produces wide range of electric kitchen appliances, sinks and stainless steel kitchen combinations. Employs 1,400. Member of prominent Swiss group. Excellent reputation. W. Biehler, Therma Haushalt AG, CH-8762 Schwanden. Telephone: 058/81 14 14. P-77528.

3679—BOLIVIA—Seeks joint venture to assemble **recording tapes.** American partner would provide components. Jorge Saravia, Kolob Enterprises S.R.L., Casilla 1633, La Paz. P-77529.

3714, 3621—FRANCE—Large manufacturer of electronic industrial apparatus, generators, condensers, forklift trucks, metalworking equipment, seeks licensing arrangement to produce **mechanical and electrical equipment and parts for automotive and aviation industries.** Products would be distributed throughout France, Europe, Africa. Firm employs 6,400. Mr. Holl, Asst. Gen. Mgr., Precision Mecanique Labinal, 17 rue de Clichy, 93403 Saint Ouen, France. Telephone, 257-1195; telex, 641 176. P-77531.

3825, 3679—FRANCE—Manufacturer of aircraft stabilizers and various electric and electronic control instruments, is seeking licensing arrangement to produce **low and high pressure transducers, and high temperature pressure transducers** for French market. Established 1947, employs 1,300. Claude Jouvenot, Chief Technical Dept., Societe de Fabrication D'Instruments de Mesure, 13 Ave. Marcel Ramolfo Garnier, 91301 Massy. Telex: 692164F SFIM. P-77530.

5411, 5142—SAUDI ARABIA—Firm seeks U.S. partner to operate chain of **grocery stores.** Also wants to import **frozen meats and other grocery products.** Company owns dairy plant, farms, real estate, bakery, laundry. Overseas Products & Investment Opportunities Staff, U.S. Department of Commerce, Room 4021, Washington, D.C. 20230. P-77536. OPIC.

The following trade opportunities are based on reports received from the U.S. Foreign Service—Department of State by the Trade Opportunities Program, Room 2323, U.S. Department of Commerce, Washington, D.C. 20230. The commodities in which foreign firms have interest indicated by codes 0111-1799 and 4011-8999 are based on the Standard Industrial Classification Manual, 1972; codes 20 through 39 come from Numerical List of Manufactured Products (New 1972 SIC Basis), MC72-1, 2. Codes beginning with 99 are from the TOP coding system.

U.S. firms should be aware that the listing in Commerce America *of opportunities to trade in specific commodities and technical data does not necessarily imply approval of their export by the Department of Commerce pursuant to the Department's Export Administration Regulations. Applicable export licensing regulations must be followed.*

Every effort is made to include only traders with good reputations. However, the Department cannot be responsible for any trade relations.

WTDR indicates that a World Traders Data Report on this specific firm is available at $15 from the Export Information Division, Room 1033, U.S. Department of Commerce, Washington, D.C. 20230. A WTDR is a trade profile which contains commercial information including financial references, on an individual foreign firm. Orders must include complete name and address of the subject firm and be accompanied by payment. Further information concerning WTDRs and request forms are available at each Commerce District Office.

Direct Sales

Partitions, shelving, lockers

2542498—EL SALVADOR—954 telephone booths; 5 different types; completely closed (whole body), half closed (half body), bubble, console, & cubicle. Financed by govt. Bid docs. available for US$60 (150 colones) first set & $20 each additional set from Departamento de Suministros (ANTE), Planta Baja, Edifico Adm., Centere de Gobierno, San Salvador. Refer to bid no. 10-77. Bid deadline for this tender Oct. 31.

Clothing patterns

2741396 — HONDURAS — Clothing patterns, paper, for men's & women's shirts, trousers, slacks, blouses in all adult sizes are required by private Honduran company. Requests responses ASAP, quote c.i.f. airfreight San Pedro Sula, against sight draft or other terms; also catalogs & price lists. Good reputation in banking & commercial circles. WTDR available. Contact—William Chahin, Partner, Almacen Don Juan, Apartado Postal 532, 3A. Calle S.O.

19, San Pedro Sula. Cable CHAMER; tel. 521581.

Industrial chemicals

2819911—BOLIVIA—Synthetically precipitated calcium aluminum silicate similar to alusil cas with following properties—fine particle size, low bulk density, high oil absorption, pure white color, free-flowing. Quotations c.i.f. Arica, Chile. Reply to—Somerid Ltda., Dario Zelaya A., Calle Puerto Rico 1497, La Paz. Cable SOMERID LA PAZ.

Nonferrous metals

3356382 — GERMANY — Gold nuggets (spherical form), weight 2-3 grams. Est. import value 3-4,000 pieces, approx. DM 10,000-20,000. Small company wants to add U.S. products for resale to dealers & end-users within Germany as advertising gifts. Lists annual sales DM 1.5 million. Requests responses in English; quote prices airmail; terms of payment upon agreement. Favorably known to Consulate General. Reply to—Mrs. Ingrid Bader, Fischreiherweg 12, D-7000 Stuttgart 50. Phone 711/531722.

General hardware

3429812—HONG KONG—Casket handles & accessories for coffin decoration. Small but aggressive firm. Good sales contact. Reply to—Au Wing Pung, Mgr., Wing Wah Co., 302 Federal Bldg., 369 Lockhart Rd., Hong Kong. Cable 1766 H.K.; tel. 5-731538.

Fabricated structural metal products

3448000, 9913109—ALGERIA—Supply & installation of equipment including framework & boilers for metalworking facility to be established at M'Sila, capacity 900 tons/yr., operating 8 hrs./day. Offer & correspondence in French required; all specs. metric. Wali is Governor of Wilaya province. Tender docs. (price unknown) available from Le Wali, Wilaya De M'Sila, Bureau D'Etudes Economiques et Techniques (ETB), M'Sila, Algeria. Bid deadline Oct. 31.

Mining equipment

3532132-41-50-71, 3532300 — YUGOSLAVIA—Equipment for annual production 854,000 m.t. dry coal. Technological process—drying with saturated steam under pressure. Coal to be processed is washed lignite with 55-60 percent moisture. Quote should include total price breakdown by type of equipment; est. dates for commencement & completion of equipment deliveries; payment conditions; detailed tech. info. Investor is Kolubara, mining & thermo electric complex, 14230 Vreoci, Yugoslavia. Request tender from investor, telex no. 12428. Submit bids to—Polsovinca Kolubara, Rudnap Export-Import, Vuka Karadzica 6, 11000 Beograd, Yugoslavia. Refer to Sluzbeni List 43/77-B2783. Bid deadline Nov. 24.

Construction machinery

3533117—INDIA—Supply of drilling & well control trainer with spares for 5 yrs. operation. Financing with World Bank loan. Bid. docs. available for $2.35 (nonrefundable) from Oil & Natural Gas Commission, Directorate of Stores & Purchase, Tel Bhawan, Dehra Dun, India. Refer to bid no. IMP/GEOL/222/76. Bid deadline Oct. 27.

Metalworking machinery

3541500—GREECE—Tenders solicited by quasi-government agency for supply of two parallel lathes. Financed from procuring agency's budget. Bid docs. available free from Public Power Corp. (PPC), Purchasing Dept., 55 Stouranri St., Athens (102). Refer to bid no. DEPM-854-1030/18. Bid deadline Oct. 26.

Special industrial machinery

3553100 — ALGERIA — Supply of equipment to manufacture wooden spools for electric cables. Offer to remain valid 90 days past bid deadline. Offer & correspondence in French required; all specs. metric. Tender docs. available for 100 DA ($24.26) from Unite Cablerie Electrique, Sonelec, Dept. Approvisionnement, Gue De Constantine, Kouba, Algiers. Refer to bid no. 300-77. Bid deadline Oct. 31.

3555100—EGYPT—Two color offset presses with following specs.—max. paper size 520 x 720 mm, min. paper size 320 x 360 mm, printing area 500 x 700 mm, hourly output 800-10,000/h, height feed pile 750 mm to 1,100 mm, height of delivery pile 500 mm, stock thickness max. 0.80 mm. Price quotations f.o.b. & c.&f. liner terms. Contact your agent in Egypt for complete specs. & conditions incl. method presenting offers. Cable MOHAPRESS; tel. 76685; telex COMALX UN 4057/034/MPA. Obtain specs. from—Foreign Purchases Dept., Societe Industrielle Moharrem Press, Canal El Mahmoudieh St., P.O. Bag, Alexandria. Refer to bid no. 3/77. No bid deadline stated.

3555500—EGYPT—One flow line 3-knife trimmer with following specs. Cap.—20-36 or 20-40 piles/min.; size—max. untrimmed size, up to 410 x 200 mm, max. trimmed size up to 380 x 270 mm, min. trimmed size, up to 148 x 100 mm, trimming height, up to 100 mm. Working with automatic feeding with all standard equip., safety device & sets—knives, plastic cutting sticks, clamp opening tools. Price quotations f.o.b. & c.&f. liner terms. Contact your agent in Egypt for complete specs. & conditions incl. method presenting offers. Cable MOHAPRESS; tel. 76685; telex COMALX UN 4057/034/MPA. Obtain specs. from—Foreign Purchases Dept., Societe Industrielle Moharrem Press, Canal El Mahmoudieh St., P.O. Bag, Alexandria. Refer to bid no. 7/77. No bid deadline stated.

Service industry machines

3585000—INDIA—Refrigerator, water cooler, air cooler; equip. for freezing semen, liquid nitrogen for installation at campus of Assam Agricultural University under education project. Financed by Intl. Devel. Assn. Procure tender docs. from below address for RS 50 ($5.76). Refer to AAU/IDA/PROC/76-77/P.23—bid package no. 12. Procurement Officer, IDA Education Project, Assam Agricultural University, Jorhat 13, Assam, India. Bid deadline Oct. 31.

Electric transmission, distrib. equip.

3612200-202-700, 3613200, 3825151—INDIA—ACSR wire conductors as follows—2,500 km 20 mm ACSR; 5,000 km 30 mm ACSR; 3,000 km 50 mm ASCR. Distrib. transformers as follows—one hundred 11/0 433 kv 63 kva; forty 11/0 433 kv 100 kva. Energy meters as follows—6,000 3-phase, 4-wire 3 x 240 v., 10 amps meters; 16,000 single phase, 2-wire 240 v., 2.5-5 amps. meters. Five 33 kva outdoor oil circuit breakers with cts, relays & control panels. Large power transformers as follows—one 110/11 kv 10 mva transformer with on-load tap changing gear; eight 33/11 kv 5 mva transformers with on-load tap changing gear; two 33/11 kv 3.15 mva transformers with on-load tap changing gear; four 33/11 kv 1.6 mva transformers with off-load taps. 65 11 kv outdoor 800 amps rating control & metering devices. Financed by IDA credit no. 572. Tender docs. available for rupees 100 (about $12) from—Superintending Engineer, Materials Management, Tamil Nadu Electricity Board, 157 Anna Salai, Madras 600002. Refer to bid no. IDA/REC/TNEB 4. Bid deadline Dec. 15.

3612200—NICARAGUA—Power transformers as follows: Package 1—4 transformers 15/20/25 MVA, 130/13.8 plus/minus 10 percent KV. Package 2—1 transformer 5.0/6.25 MVA, 130/13.8 plus/minus 10 percent KV. Package 3—1 transformer 7.5/9.375 MVA, 130/13.8 plus/minus 10 percent KV. Package 4—1 transformer 5.0/6.25 MVA, 130/24.9 plus/minus 10 percent KV. Bid docs. for design, supply, delivery & supervision of installation of above equip. available for US$50 from below address, addit. sets US$20. Delivery must be made according to following packages & schedules; package 1 (3 transformers), & packages 2 & 3 must be delivered within 450 calendar days after signing of contract; package 1 (1 transformer) & package 4 within 600 calendar days. Bid bond required. Financed with IBRD assistance.

Important Notice

Most member countries of the League of Arab States employ a secondary boycott against foreign firms which undertake certain specific types of business relationships with the State of Israel. The Commerce Department will not disseminate nor make available for inspection any tenders or trade opportunity documents which contain conditions intended to support such boycotts, or which are based on documents known to contain such provisions. Trade or investment opportunities published herein are not presently known to be subject to such conditions. However, it is possible that U.S. firms responding to opportunities from Arab countries may be asked at some stage of a transaction to participate in an Arab boycott-related restrictive trade practice as defined in the Department's Export Administration Regulations (15 CFR, Part 369 et. seq.).

Firms are reminded that it is the policy of the United States (a) to oppose restrictive trade practices or boycotts fostered or imposed by foreign countries against other countries friendly to the United States, and (b) to encourage and request U.S. concerns engaged in the export of articles, materials, supplies, or information to refuse to take any action, including the furnishing of information or the signing of agreements, which has the effect of furthering or supporting such restrictive trade practices or boycotts. Accordingly, U.S. concerns receiving such requests to participate in a restrictive trade practice or boycott are encouraged and requested to refuse to comply with them.

Firms are further reminded that U.S. concerns receiving requests to participate in a restrictive trade practice or boycott must report such request to the Department of Commerce in accordance with Section 369.4 of the above-cited regulations.

Obtain bid docs. from—Empresa Nacional De Luz Y Fuerza (ENALUF), Secretaria De La Presidencia Ejecutiva, Apartado Postal 55, Pista De Circumvalacion, Managua. Bid deadline Nov. 29.

3613312, 3641000-42000-43000-44000 — COLOMBIA—Bogota water supply company interested in purchasing following electrical materials for El Sapo water treatment plant: control panelboards, electrical metal conduit & fittings, current-carrying wiring devices, non-current-carrying wiring devices, electric lamps. Financed by World Bank. Proposals must be presented through authorized local agents. Refer to Lic. Pub. Internacional 370-OP-11-22. Specs. available for 1,000 pesos or $27 first copy & 400 pesos or $11 each additional copy from Direccion Del Plan Maestro De Acueducto, Empresa De Acueducto Y Alcantarillado De Bogota, D.E., Calle 22-C No. 40-99, Bogota. Bid deadline Nov. 28.

Communications equipment

3661124—GREECE—Supply of automatic electromechanical telephone exchange equipment for 234,700 new lines. Financed from procuring agency's budget. Bid docs. free from Hellenic Telecommunications Organization S.A. (OTE), Purchasing Dept., 6 Klissovis St., Athens. Refer to bid no. 7202. Bid deadline Nov. 15.

3661279—SINGAPORE—Supply & delivery 4 units high grade frequency synthesized H.F. dual diversity telegraph receivers suitable for long range intl. point-to-point circuits where reliable operation is absolute necessity. Receiver should comply with all C.C.I.R. recommendations pertaining to this class equip. Should incorporate latest solid-state techniques, with modular construction for minimal repair time. Facilities for local, extended & remote control of receiver required. Tender docs. available below address upon payment of crossed check, made out in favor of "Telecommunication Authority of Singapore," for S$1,000 (approx. US$400) & must be obtained prior to submitting offers. Deposits will be refunded in full to tenderers who return bona-fide tender. Obtain bid docs. from—D. W.H. Ting, Head, Purchasing, Radio & Transmission Dept., Telecommunication Authority of Singapore, 68 Orchard Rd., Singapore 9. Refer to tender no. —PT/109/77 (Y). Bid deadline Oct. 28.

3662100—ETHIOPIA—Carrier multiplex & UHF radio systems. Price must be c.i.f. Assab for shipment by ocean freight with insurance paid up to Addis Ababa, TSE's warehouse. Bid bond of Eth. birr 4,000 (US$1932.40) by first class bank or insurance co. must accompany bid. Payment made from IDA-granted loan 10 percent of contract value upon signing of agreement, 80 percent of each shipment 45 days after receipt of shipping docs. against draft, 10 percent of contract value upon expiry of 1 yr. guarantee from date equip. received. Bid docs. available free from Gen. Mgr., Telecommunications Service of Ethiopia, Room 201, P.O. Box 1047, Addis Ababa. Refer to bid no. 14/77. Bid deadline Nov. 24.

3662100—GREECE—Supply of material & equipment for 10 medium-capacity carrier links. Financed from OTE's budget. Bid docs. free from Hellenic Telecommunication Organization (OTE), Call For Bids Div., 6 Klissovis St., Athens. Refer to bid no. 7224. Bid deadline Oct. 26.

3662512—YUGOSLAVIA—Metal detector for checking passengers at Belgrade Airport. Requests detailed tech. description, list of references, warranties, list of recommended spare parts; price; credit; deadline for delivery, assembly & trial run. Bid docs. must be obtained from Komercijalni Sektor, Aerodrom Beograd, 11003 Beograd 31; telex 11660, prior to submitting bids. Refer to bid no. Sluzbeni List 42/77-B2712. Submit bid docs to—Komisija Za Izabor/Ponuda, Aerodrom Beograd, 11003 Beograd 31, Yugoslavia. Bid deadline Nov. 17.

Motor vehicles, equipment

3711231-33-41, 3523112-113-810-890, 9912900 —TANZANIA—3 four-wheel drive pickups. 2 four-wheel drive hardtops. 1 four-wheel drive station wagon. 2 seven-ton flatbed truck/lorry. 2 seven-ton tipper truck/lorry. Four 75 to 80-hp wheeled tractors. 2 weeding machines. 4 tractor trailers, 6 ton. 2 plows—heavy 4-disc. 3 fire-fighting trailer pump units. 2 ship-on water tanks. Complete telecommunication system. Various mechanical & vehicle workshop & equip. Complete overhead irrigation system. Financed by IBRD. Tender docs. available from Dept. of Commerce, TOP, Rm. 2321, Wash., D.C. 20230, tel. 202-377-2251. Submit bids to—Secretary, Central Tender Board, P.O. Box 49, Dar Es Salaam. Refer to bid no. 36, 1977/78. Bid deadline Oct. 27.

Ship building, repairing

3731325-27, 9913107—COSTA RICA—50 fishing boats, 10 to 10.36 meters; 1 fishing boat, 21 meters. Bid, part of national fishing dev. plan, calls for quotations for construction 50 fishing vessels & 1 fishing training vessel for Puntarenas Fisherman's Cooperative. Prices must be good for 120 working days from bid's opening date. Equip. must be guaranteed by mfr. for 6 mo. after delivery. Bid docs. establish preference for local construction (defined as 40 percent total cost) by adding to c.i.f. price of foreign-origin bids, 15 percent or equivalent of customs duties, whichever is less. Payment conditions for 10 to 10.36 meter boats are 10 percent within 10 days contract signing, 50 percent when construction completed, 30 percent on delivery in Puntarenas (Pacific Coast), with 10 percent retained as performance guarantee. Payment conditions for 21 meter vessel 10 percent within 10 days contract signing, 35 per cent when hull is completed, 30 percent on launching, & 25 percent 15 days after delivery in Puntarenas. Price & delivery very important aspects in winning bid. Financed by Inter-American Dev. Bank & Banco Anglo Costarricense. Specs., requirements & conditions available from Sr. Gerente General, Co-operativa De Pescadores De Puntarenas R.L., C/O Banco Anglo Costarricense, Seccion De Financiacion Pesquera, Apartado 10038, San Jose, Costa Rica. Tel. 23-23-98. Bid deadline Nov. 15. Refer to—Propuesta Para La Construccion De Flota Pesquera.

Railroad equipment

3743200 — TUNISIA — Eighty bogie self-unloading railway freight cars for transport of cement, metric gauge. Tender docs. & specs. in French available for $100 each (bank transfer or international money order) from Societe Nationale Des Chemins De Fer Tunisiens (SNCFT), 67 Ave. Farhat Hached, Tunis. Refer to bid no. MT 12. Bid deadline Dec. 6.

3743209—EL SALVADOR—10 railmotor cars for inspection purposes, 2 speeds (back & forth), gasoline engine. Financed by government. Bid docs. available for US$8 (20 colones) first set & $4 (10 colones) each additional, from Gerencia De Planeamiento Ferroviario De Los Ferrocarriles De El Salvador, Avenida Peralta, Contiguo Colegio Don Bosco, San Salvador. Refer to CEPA-FENADESAL No. 6/77. Bid deadline Nov. 7.

Measuring & controlling devices

3822070—SOUTH AFRICA—Smoke emitters & generators & airtesting instruments & devices for use in wind tunnels for calibrating anemometers used in mines. There is also good local demand for smoke generators for testing airconditioning systems for air leakage. Well-estab. co. dealing mainly in scientific instrumentation used in mines. Requires f.o.b. prices & advice on availability of stock together with product literature. Reply ASAP to—Douglas Giles, Mng. Dir., D. Giles Scientific (Pty) Ltd., P.O. Box 3891, Johannesburg. Tel. 011/725-2810.

Construction and equipment

● **9910100, 3559111, 9922106—KOREA**—Hyundai Intl. Inc. (HII), member of Hyundai Business Group, plans to construct Korea's second caprolactam plant at Yochon Petrochemical Complex Industrial Zone on s. coast Korea. Plant will have production cap. 100,000 mt./yr. Total project costs presently est. $168 million. Foreign exchange cost of $68 million for import plant equip. & employment of foreign consultant services to assist HII in planning construction of plant (basic engineering). Detailed engineering, procurement & construction supervision will be financed through foreign loans or supplier's credit. Has not yet arranged financing for foreign exchange costs. Bid date depends on availability financing foreign exchange costs. Tentative implementation schedule calls for approval of govt. by end Dec. Basic engineering & detailed design expected start first part 1978, with civil engineering & bldg. constr. work commencing mid-1978 & plant equip. to be installed by mid-1980. Involvement could include basic engineering consulting service and/or detailed design, procurement, erection & constr. supervision. Equip for subject project to be stamicarbon hydroxylamine phosphate oxime (h.p.o.) package process. Interested U.S. firms should immediately contact Lee Ok Suk, Dir., Chemical & Petrochemical Plant Dept., Hyundai International Inc. (HII), 200 Dangjung-Ri, Nam-Myun, Siheung-Gun, Kyunggi-Do, Korea. Telex—HINTLA K28388, HINTL K27461, cable—ROKATLAS (Seoul).

9910501, 3559111—YUGOSLAVIA—Know-how (license), engineering, supervision construction & trial run & equip. for production 5,000 m/t yr. SBR-latex (dry substance). Should be possible to increase cap. to 10,000 m/t. in future phase. Products assortment—50 percent SBR-latex for rug industry (tufting); 50 percent SBR-latex for non-woven materials; 48-50 percent SBR-latex for paper industry; 56 percent SBR-latex for rug industry (non-gel); 50 percent SBR-latex for construction industry; & 62-64 percent SBR-latex for rubber industry. Bid should cover all equip. except warehousing facilities. Included with bid should be description technological process, raw material input & finished product output specs., & equip. details (including tech. description, unit prices, commercial conditions, financial conditions—cash & credit). For more details write or telex Predstavnistvo Beograd, Kemijaimpex Ljubljana, Dobrinjska

3, 11000 Beograde. Telex 11336. Refer to Sluzbeni List 43/47—LJ946. Bid deadline Nov. 24.

9911100, 3423200-3300, 3523000-72000-73000-74000—INDONESIA—Dept. of Agric., Directorate Gen. Food Crop Agric., invites sealed bids from World Bank member countries & Switzerland either directly or through Indonesian reps., for immediate supply of equipment for agricultural extension facility, plant protection equipment & agricultural field instrument for national food crop extension project, financed under IBRD loan no. 1267-IND. Tender docs. available for rupiah 5,000 (approx. $12.05) from Bagus Ruhnayat, Chief Logistics Div., Directorate Gen. Food Crop Agric., Bagian Perlengkapan, Jalan Salemba Raya 16, Jakarta Pusat, Indonesia. Refer to bid no. IBRD-4/NFCEP/1977. Bid deadline Oct. 31.

9911213, 9917199-304-399—BAHRAIN—Commodities warehouses. Agricultural products storage systems, equip., & handling. Foodstuff refrigeration & storage equip., & systems. Commodities incl. foodstuff handling, packing & repacking equip. For commercial cooperation between Bahrain & New Zealand, consultants for construction of warehousing center & cold stores at port's free zone area for New Zealand commodities will be appointed shortly. Project will be tendered internationally by end of year. Cost est. $12.5 million & will be covered 51 percent by Bahrain & 49 percent by New Zealand. Project will be based on bulk imports in containers various New Zealand commodities, but mainly fresh, chilled & frozen foodstuffs, storing & reexporting in smaller consignments to neighboring markets. No more details or specifics yet known but advise that interested companies write to Minister of Commerce & Agriculture, P.O. Box 251, Manama, Bahrain.

9915106—INDONESIA—Min. Public Works & Electric Power, Directorate Gen. Water Resources Dev., invites formal written bids from U.S. mfrs. with reps. or agents in Indonesia for furnishing & delivering equip. for Luwu Irrigation Project financed under A.I.D. loan 497-T-038. Invitation to bid available for rupiah 4,500 (approx. $10.84) from Ir. Moeabagio, Dir. Logistics, Min. Public Works & Electric Power, Jalan Pattimura No. 20, Kebayoran Baru, Jakarta, or Rep. Indonesia Chancery, 2020 Mass. Ave., NW., Wash., D.C. 20036 (For—Dir. Irrigation Luwu Irrigation Project). Refer to bid no. 01/DITJENAIR/LUWU/77. Bid deadline Nov. 7.

9915503—ECUADOR—Govt. plans constr. $3 million municipal waste treatment plant in Cuenca (pop. 90,000) for 45 tons garbage/day. Organic matter to be recycled to obtain fertilizer; other recycling, e.g., metals, glass, not practicable due to composition of waste. Similar, larger, plants profitably operate in Quito & Guayaquil presently. Interested firms requested supply technical info, prices, financing, & other terms of sales to Ing. Jaime Pavon Trujillo, Junta Nacional De Planidicacion Y, Coordinacion Economica, Ave. 10 De Agosto No. 600 Y Checa, Quito. Tel. 541000, Ext. 213 or 214.

9916199—BOLIVIA—Elaboration of project & final design for enlargement of Jorge Wilsterman airport in Cochabamba. Specs. must be obtained from address below for US$25 prior to submitting bids. U.S. firm must have Bolivian representative. Refer to bid no. 7/77 World Bank Loan 1423 BO. Obtain bid docs from—Administracion De Aeropuertos Y Servicios Auxiliares A La Navegacion Aerea, My. Dim Aroldo Cortez J., Casilla 4382, La Paz. Bid deadline Oct. 31.

● **9916300—PAPUA NEW GUINEA**—Applications invited from prospective tenderers by Harbours Board for construction of port development project. Est. cost 5 million Kina (U.S. $6 million). Financed by World Bank. Brief description of project — heavy-duty concrete-decked wharf, 125 meters long & land backed. Tubular steel wharf piling, 110 piles in number with total est. length 4350 lineal meters; dredging, 160,000 cu. meters; landfill reclamation, 170,000 cu. meters; heavy-duty paving 26,600 sq. meters; extension existing steel-framed cargo shed by 32000 sq. meters. Electrical services incl. 3 high-mast lights (30 meters) & power outlets for 40 reefer containers; office facilities & waterside worker amenities; water supply & sewerage (200 persons). Bidders obtain forms for registration from Secretary, Papua New Guinea Harbours Board, P.O. Box 671, Port Moresby, telex NE 22243. Refer to bid no. E775/77. Bid deadline Nov. 15.

9916400—MALAYSIA—Govt. invites experienced contractors to be prequalified for resurfacing Highway Route I in State of Johore. Total mileage isolated stretches existing roads which require resurfacing about 121 miles. Materials to be used will be asphaltic concrete mixes to be designed to marshall methods. Quantities asphaltic concrete required approx. 235,000 tons. Resurfacing scheduled to start around Feb. 1978 & whole work est. to be complete within 18 mo. Overseas contractors, if they wish, may form joint venture with Malaysian contractors for purpose of executing work. Financed by loans from IBRD. Further particulars & application forms obtainable from Dir. Gen. Public Works, Attn. Dir. Roads, Public Works Dept., Jalan Tun Ismail, Kuala Lumpur 10-02. Prequal. deadline Oct. 31.

9918102—PANAMA—IRHE, Panama's electric power authority, issuing bid to finance, supply, deliver & install, 3 hydraulic turbines, 3 generators vertical axle, 85 mw, & 3 spherical valves. Equip. required for completion of third phase IRHE generators, turbines for Fortuna Hydroelectric Project, with total cost $235 million. Fortuna project partially financed by IDB & IBRD, through $140 million loan. U.S. bidders must incl. financing arrangements, design, transportation, & installation costs equip. in bid. Bid docs., maps, prints & specs. can be reviewed at below IRHE office in Panama, Chas. T. Main Intl., Inc., Prudential Center, Boston (IRHE consultants); & at Panama's embassies in Wash., France, Italy, U.K. Germany, Spain & Japan. Complete set docs. obtainable for $300 from Chas. T. Main offices in Boston or Arq. Edwin Fabrega, Dir. General, Instituto De Recursos Hidraulicos Y Electrificacion (IRHE), Apartado 5285, Panama 5. Refer to IRHE bid no. 536-77. Bid deadline Nov. 29.

Consultancy & services

9923202 — MOROCCO — Feasibility study and/or construction with or without joint venture participation of phase 1, broiler production complex. Phase 1 will have production & incubation cap. 60,000 eggs/wk. & production 15 percent of that no. broilers, i.e., 450,000 broilers/yr. 6 phases program will be carried out between 1978 & 1982. Phase 2—construction units to produce 2,550,000 broiler/yr.; phase 3, expansion phase 1 egg production & incubation cap. to 120,000 eggs/wk.; phase 4, construction 1 or more units to produce 3 million broilers/yr.; phase 5, expansion hatchery & incubator to 240,000 eggs/wk.; & phase 6, construction unit to produce 6 million broilers/yr. All egg production & incubation cap. will be centralized; broiler production dispersed near population centers. Incubation cap. will be connected with raising parent stock & layers. Feasibility study will cover choice site (of 3 to be proposed by SNDE), considering physical & economic factors incl. distribution of day-olds, labor availability, availability of feed & sanitary conditions; general organization production incl. hatchery, & liaison with poultry producers using day-olds purchased from hatchery; description bldgs. & equip, for both hatchery & broiler production, layouts, personnel requirements, cost, vehicles, offices & dwellings, access roads, water & electricity supply, & sewage; organization & management; & financial & economic data incl. investment, operating costs, structure of selling price of hatching eggs, day-olds, culled hens, culled cockerels & finished broilers, sales planning, project evaluation, project financing & financial analysis. Financed by Moroccan Central Govt. investment budget. Bid bond 5 percent total amount either in check or bank guarantee. Submissions must comply with details described in specs. available from Dept. of Commerce, TOP, Rm. 2321, Wash., D.C. 20230; tel. 202-377-2251. Submit bids in French to—Societe Nationale Developpement De L'Elevage, S.N.D.E., 5, Rue De Sale, Tour Hassan, Rabat. Bid deadline Oct. 30.

Representations

Foreign private firms are interested in agency agreements and/or distributorships for these products.

Textile goods

2298129-39—TRINIDAD AND TOBAGO—Nylon wire & synthetic rope over 2½" in diameter. Company was recently estab. to operate as wholesalers & mfrs.' reps. covering wide range of products incl. safety devices & other lines. Foresees substantial market in Trinidad for above & wishes receive c.i.f. Port of Spain price quotations. Seeking excl. rep. in this market. Firm's principal directors are major shareholders & directors of several large local business concerns & are all of sound financial worth. Call or write—Frank Mouttet, Dir., Frank Mouttet Ltd., 19 Gordon St., Port of Spain. Cable MOUTEL; tel. 62/31450.

Women's, misses' undergarments

2342281—FRANCE—Agency sought for corset accessories (clasps, stays, etc.). Has been working as manufacturers agent since 1973. Claims annual sales reached 2,000,000 francs. Marketing territory—France. Bank refs.: Banque Nationale De Paris, Credit Commercial De France. Reply to—Alain Riberolle, 110 Rue Reaumur, 75002 Paris. Tel. 236-5353.

Fabricated textile products

2392911—HONDURAS—Seeks distributorship for cotton terry towels for infants. Covers & services northern area of country. 1976 sales volume $1.3 million; employs 20. Financial obligations met promptly. Requests responses soon as possible,

incl. catalogs, distributor prices & supplier terms. Contact—Jose E. Yuja, Mgr., Agencia la Mundial, Apartado Postal 830, 7 Calle S.O. 74, San Pedro Sula. Cable MUNDIAL; tel. 521062.

Pulp mills, products

2611111—KOREA—Direct sale, agency or distrib. for bleached wood pulp for production of paper. Monthly requirement 50 m/t. Seeks price quotations, shipping terms & proposal for agency agreement from U.S. source of supply. Registered offer agent, official status required in Korea to represent foreign suppliers & submit price quotations in own name. Reply to—C. K. Pack, Kang Bros. & Co., CPO Box 6995, Seoul. Cable KANGROSCO SEOUL; tel. 28-2929.

Industrial chemicals

2816111—NETHERLANDS—Seeks excl. repr. for organic pigments. Estab. 1917, has 600 employees & reports sales $80 million. Div. of Henkel Nederland, which in turn is Dutch subsidiary of large Henkel Intl. GmbH of Duesseldorf, W. Germany. Henkel Chemie sells industrial adhesives, technical cleaning & degreasing chemicals, wide range of chemical raw materials for industry, incl. paper chemicals. Although much of sales program comes from Henkel plants, co. also represents foreign mfrs. Has excellent reputation & considered highly competent. Bank ref.—Amsterdam Rotterdam Bank N.V., Amsterdam. Reply to—H. A. Van Den Berg, Dir., Henkel Chemie B.V., P.O. Box 623, Amstelveen, Netherlands. Tel. (020) 5401911; telex 13440.

2819907-82-83—NETHERLANDS—Agency opportunity for bismuth compounds, subcarbonate titanium compounds, tetrachloride, other titanium compounds. Estab. 1952, has sales of about $6 million & employs 5. Exports & imports pharmaceutical & ag. chemicals, primarily to & from E. Germany, but also to & from U.K. & Belgium. Would like to build contacts with U.S. mfrs. of chemicals & operate as their agent in Benelux & E. German markets. Financial ref.—Amsterdam Rotterdam Bank, Wychen (Bld.), Netherlands. Reply to—F. Van Leeuwen, Sales Mgr., PNM Hooge Chemicalien B.V., P.O. Box 1167, Den Bosch, Netherlands. Tel. (073) 14621; telex 50310.

2819917—HONG KONG—Direct sale & agency opportunity for copper cyanide & sodium cyanide. Active importer & distributor, dealing in assorted chemical products. Good sales contact. Cable—W. K. Ling, Dir., Wing Shing Industrial Chemical Supplies, Ltd., 8 Ti Hong Lane, Central Hong Kong. Cable WINGCHEM HK; tel. 5-447641.

Nonferrous metals, rolled & drawn

3353351—HONG KONG—Direct sale & distrib. opportunity for aluminum foil. Active & aggressive firm with satisfactory financial status. Good sales contact. Augustine H. Wan, Dir., Yetex & Co., Harbour View Commercial Bldg., Room B, 18/F, 2-4 Percival St., Hong Kong. Telex 65325 YETEX; tel. 5-795417.

3356998—HONDURAS—Seeks agency for tin bars for sealing metal sheets. Buyer covers & services entire country. Represents several U.S. firms for other lines, wishes to expand business to include above. Request responses ASAP, quote c.i.f. airfreight Tegucigalpa, against supplier terms; also requests catalogs & price lists. Enjoys good reputation in commercial & bank circles. Contact—Mayo Andonie, Import Sales Mgr., Representaciones Adonie, Avenida Espana 1026, Barrio El Bosque, Tegucigalpa, D.C. Tel. 221591.

Fabricated structural metal products

3441381—AUSTRALIA—Open web steel joists; steel building products, commercial, residential & institutional. Firm is medium-size manufacturer of ventilation equipment, importer & distributor of above, intends to expand its market range. Working capital US$165,000, sales volume $3.9 million. Employs 60. Presently imports from U.S., Germany, Taiwan, Japan, Argentina, France. Reply to—J. A. Leckey, Gen. Mgr., Hunt Engineering Pty. Ltd., 227 Abbotsford St., North Melbourne, Vic. 3051. Cable HUNTENG, MELBOURNE; telex AA31701; tel. 03/3298277.

Power tools

3546100-18-19-22-28 — FRANCE — Firm wants direct sale, representation or manufacture under license electric drills; saws—jig, saber, reciprocating; electric screwdrivers & nut-runners; shears, nibblers, grinders, polishers & circular sanders. Estab. 1960, capitalized at 200,000 francs. Employs 150 & 3 salesmen. Manufacturer, exporter of automotive parts & accessories. Marketing territory covers France & Europe. According to firm's statement, 1976 sales volume reached 25 million francs (before taxes). Bank ref.: Societe Generale, Banque Nationale De Paris, 93500 Pantin. Reply to G. Martinez, Pres. & Gen. Mgr., Salamon S.A., 99 Route De Noisy, B.P. 10, 93230 Romainville. Telex SALANON 680601; tel. 843-9191.

Special industrial machinery

3559589 — EGYPT — Agency sought for stoneworking machinery. Company is one of the larger granite & other stone cutting & grinding firms in Egypt. Contact—Engineer Aida Moetassim, Mng. Dir., El Handassia for Marble & Granite. Tel. 20350/24247/32706.

Electronic components, accessories

3672015, 3825258—SINGAPORE—Firm seeks to act as agent for electronic color reproduction equipment for substantial untapped market throughout ASEAN region. Also, radio sondes, 403 megaherts, for meteorological work, about 7,000 units/yr. Prices f.o.b. or c.i.f. Large well-estab. trading firm, expanding its sales efforts throughout Asian countries, especially in Thailand, via its Singapore offices. Exclusive agencies requested. While exact sales figures not fully determined for the above products, Forlin confident that potential sales are substantial: i.e., in millions of dollars/yr. payment by L/C. WTDR 6/76, update in preparation. Satisfactory trade contact. Bank ref.: Chartered Bank, Battery Road, Singapore 1. Trade refs: Burroughs Corp., Detroit; A. B. Dick, Chicago. Reply to—J. E. Forlin, Plessey Sengapore Pte. Ltd., 14 Shaw Road, Paya Lebar, P.O. Box 50, Singapore 13. Rel 805 111. Cable PLESSEYSIN; telex RS 23844.

Measuring & controlling devices

3829290—SWEDEN—Noise level measuring & recording instruments for work milieu applications. Employs 15, 9 salesmen. Annual turnover 10 million Kr. Sonesson group employs 1,800, of whom 500 outside Sweden. Group reports 403 million Kr. in annual sales, 50 percent registered abroad. Has 23 subsidiaries in Sweden, Denmark, Finland, Norway, U.K., Germany, France, Austria, & Brazil. Specializes in technically advanced products for transportation, construction & process industries. Mainly does business with materials handling equip. Excellent reputation. Reliable local credit source highly recommends business relations. Ref.: Bassick Co., Bridgeport, Div. of Stewart-Warner. Excl. agencies for Sweden, Norway, Denmark, Finland, & W. Germany. Reply to—

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Novelties, notions

3964287—GUATEMALA—Excl. representation sought for diaper safety pins. Mrs. Sabbagh & a friend will open new store to sell baby clothes, toys & accessories for children 1-8 years. Her husband is manager of sub-division of Compania de Aguas San Cristobal, San Jose Las Rosas, & Balcones de San Cristobal. Family is wealthy. Reply to—Luna De Sabbagh, 7A. Avenida 11-71, Zona 9, Guatemala City. Tel. 313008.

Future Construction Abroad

SWITZERLAND—Societe Generale Pour L'Industrie (SGI) has been awarded contract by Angolan Government to organize and supervise establishment of **62 prefabricated buildings** to house telecommunications equipment. Covered surface of all 62 buildings will total 1,500 sq. meters. Height of ceiling to be 3.5 meters. Building materials and set-up to be offered separately. Detailed specifications available by Oct. 15. Telex or cable SGI for specs. Potential bidders should also airmail to SGI available sales literature about buildings they already produce as well as information about previous experience in this field. Contact: SGI Consulting Engineers, Attn: Mr. Manoli or Mr. Azzolini, 1216 Cointrin, Geneva, Switzerland; telex 22044 SGI CH; Cable address: SOGIDUSTRY.

MALAYSIA—Land development, FELDA VI, based on tree crops, including clearing of forest, planting, and construction of villages, roads, utilities and social facilities. Project being prepared by Federal Land Development Authority (FELDA), which will be responsible for its execution. According to FELDA, total project cost estimated at U.S.$123.3 million, of which foreign exchange component would be U.S.$20.6 million. Targeted to develop 350,000 acres during Third Malaysia Plan (1976-80). In addition to planting of rubber and oil palm, agency will carry out additional responsibility of introducing diversified crops as well as promoting social and infrastructural development. Contact: Surjit Singh, Deputy Dir.-Gen., FELDA, Jalan Maktab, Kuala Lumpur 15-02. OPIC.

MALAYSIA—Government plans **irrigation project,** covering total area of 54,000 hectares. Total project cost estimated at U.S.$89 million, of which foreign exchange component would be U.S.$39 million. Proposed IBRD loan of U.S.$39 million will finance foreign exchange component. Civil works element (U.S.$71.3 million) of program would be implemented through large number (approx. 390) of small contracts, averaging about U.S.$130,000 in value. Contracts for civil works element would be awarded to local contractors. Pumps and associated equipment to be installed in project schemes (U.S.$5.4 million), and operation and maintenance equipment and vehicles (U.S.$2.8 million), will be procured under international competitive bidding in accordance with IBRD guidelines. Contact: Phang Leong Hoon, Dir. Gen., Drainage & Irrigation Malaysia, Jalan Swettenham, Kuala Lumpur 10-02. OPIC.

The Overseas Private Investment Corp. (OPIC) offers political risk insurance on assets and bank guaranties to U.S. construction and service firms planning to submit bids on projects in certain developing countries, identified by the "OPIC" notation at the end of some items. For further information on OPIC's contract insurance programs, write Construction Insurance Officer, Overseas Private Investment Corp., Washington, D.C. 20527. Tel: 202-632-7825.

Visiting Buyers & Officials

SWITZERLAND — Businessman visiting U.S. Oct. 24-Nov. 11; itinerary includes Baltimore, New York, Chicago, San Francisco and Los Angeles. He is interested in representing in USSR, U.S. manufacturers of **electronics production and test equipment for printed and integrated circuits, thick and thin-film techniques and hybrids; automatic component insertion machines for printed circuits; automatic testing equipment and instruments for printed circuits, analog or digital, with or without components of advanced design.** For further information contact Jim Nader, Foreign Buyer Program, U.S. Department of Commerce, Room 2322, Washington, D.C. 20230, 202-377-3265.

NEW ZEALAND—John Nicklin, Auckland, wants contact with U.S. sources of **hardware and fittings for personal and industrial safety equipment, cargo handling and securing equipment, i.e., linesmen harnesses, passenger vehicle seat belts.** For additional information contact Theresa E. Rettig, Foreign Buyer Program, Room 2322, U.S. Department of Commerce, Washington, D.C. 20230, 202-377-3265.

PAKISTAN — S.A. Quddus of Lahore plans to be in the United States beginning Oct. 1 for two weeks. He wants to purchase stock lots of **cellulose acetate sheets and optical lenses for sun and sight.** Contact Theresa E. Rettig, 202-377-3265.

AUSTRALIA — Future visitor to U.S. wishes to purchase **new or used cut-off (cut-up) line to de-coil and cut to length steel plate from 3mm to 10mm thick and from 1,500mm to 3,100mm wide.** Theresa E. Rettig, 202-377-3265.

ECUADOR—Joyce Ginatta would like to hear from U.S. manufacturers of **air compressors, portable light and power generators, boilers, pressure valves and machine tools.** Sixty-cycle 110/220 volt AC is available. Theresa Rittig, 202-377-3265.

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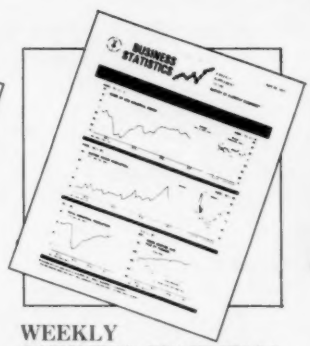

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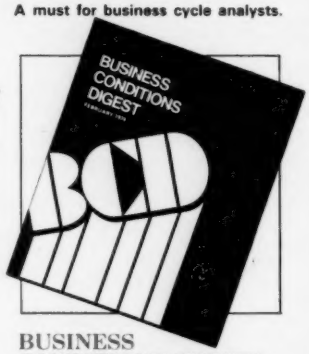

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